

Grading in
Public
Examinations
(CBSE)

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GRADING IN PUBLIC EXAMINATIONS



CENTRAL BOARD OF SECONDARY EDUCATION

DELHI - 110092

NIEPA DC



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DOCUMENTATION CENTER
National Institute of Educational
Planning and Administration

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Chennai 600 005

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FOREWORD

The document 'GRADING IN PUBLIC EXAMINATIONS' is an attempt to charter one of CBSE's future directions in Examination Reform.

The proposal contained therein involves

- Declaration of Examination results in terms of *grades* without reference to marks
- Permitting students to clear examinations in parts (within a specified time-frame) instead of accomplishing the feat in one go.
- Issue of Grade sheets to all students in the subject in which they attain the qualifying level
- Building in equity as a philosophy in the ethos of education

The central purpose of the document is to familiarise the students, teachers and the public at large about the genesis of the reform measures and the gains it is likely to yield through a non-technical and easily understandable presentation.

The move, on the one hand, embodies the vision of the CBSE for completing its unfinished agenda and on the other, reflects its honest commitment for implementing the long standing recommendations of various committees and commissions including the NPE 1986/92.

The replacement of Marks with *grades* in the declaration of examination results, is a unanimous conclusion of unnumerable nation-wide debates and discussions spread over several decades. There is, therefore, no apparent need for presenting any justifications for the change or to be defensive on that count.

The CBSE has already undertaken almost all the preparatory steps for introducing *grades*, which could in fact be called as 'leaps'. The present proposal by comparison is only a 'step' forward.

The proposal possesses the immense potential for stemming the injustices of misclassification dumped on the students, through traditional practice of using marks; erase the tension and fear of examinations from their mind; enable them to

proceed at their own pace and take off the social stigma of failure from the examination scene.

It is my hope that all the sister Boards and Universities will pick-up the challenge for emancipating examinations from the clutches of the demon of marks and that the students and the public will hail the stride with a sigh of comfort and relief.

I am also confident that the Universities and institutions of higher learning too will, without reservations, endorse the great reform and make effective preparations for meeting the change squarely and steadfastly thereby constructively contributing to the ushering in this much needed and yet much awaited cultural change.

I cannot but be thankful to Prof. H.S.Srivastava, Prof. ABL Srivastava, Prof. Pritam Singh and Prof. Ved Prakash, who need no introduction in the field of educational evaluation for their valuable contribution to the development of the present document. The valuable academic and administrative contribution of Shri Pavnesh Kumar, Controller of Examinations, CBSE and his team does deserve all appreciation.

21st Feb., 2000

**Prof. B.P.Khandelwal
Chairman,
CBSE, Delhi**

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HISTORICAL PERSPECTIVE

Examinations in India, even though they have been a subject of vehement criticism both by the Educationists and the public, have continued to exist because of a viable alternative. Much has been written by various official Committees and Commissions on the baneful effects of the system of examinations on education in general and secondary education in particular. The Secondary Education Commission after reviewing the shortcomings of examinations at the secondary stage made a number of concrete proposals for their improvement. The most outstanding feature of the reforms suggested by the Secondary Education Commission was the emphasis laid on the modern concept of evaluation in which evaluation was envisaged as an integral part of the total teaching-learning and as an instrument of qualitative improvement in education.

Education Commission (1964-66) underlined a number of shortcomings in the external examinations at the school stage. Some of the main of these are those related to the questions and the question papers set at the examination, scoring procedures, mechanics of conducting examinations, meaningful declaration of results etc. It also observed that the paper setters are, by and large, appointed on the basis of seniority, subject competence and experience in teaching. Very few of them possess the necessary knowledge and skill in planning and construction of valid and reliable tests. The Commission opined that no major break-through in the improvement of external examinations is possible unless the technical competence of paper-setters is raised through intensive training programmes sponsored by the State Boards and the question papers are focussed on testing not merely the acquisition of knowledge but also the ability to apply knowledge and the assessment of problem solving and critical thinking abilities.

Apart from the improvement of questions and question papers there are many other facets of external examinations which need attention for being made more systematic and scientific. All these tend to adversely influence the reliability and validity of the scores.

Deliberating on the large incidence of failures in examinations the commission observed:

"The matter about which the public at large is most deeply concerned is not the irrationality of the scoring procedures or the inefficiency of the administrative procedures, but the large incidence of failures in the external examinations at the end of the school stage. An analysis of the result of school examinations also shows that about 55% of candidates appearing for the high school examination and about 40% of those appearing for the higher secondary school examination fail regularly every year. In the case of private students, the percentage of failures soars upto 70% or even more. Failure, often has a demoralising effect on the unsuccessful candidates. The future of such a large number of students, particularly after they have been screened year after year by means of annual and other school examinations, is a sad reflection on our methods of education as well as on our system of examination."

The Commission further opined :

"we do not think that a student should be branded as a total failure, if he passes in certain subjects but is unable to make the grade in others. There is no reason why he should carry with him the stigma of being declared an unsuccessful candidate if he has partially succeeded in his educational efforts."

The reason prompting the CBSE to the present initiative was the recommendation of the commission in this regard that :

"the certificate issued by the Board on the basis of the external examinations at the end of the lower or higher secondary stage, should give the candidates performance only in those subjects in which he has passed, but there should be no remark to the effect that he has passed or failed in the whole examination..... the candidate should be permitted to appear again; if he so desires, for the entire examination or for separate subjects in order to improve his performance. On the completion of the course, at the end of the lower or higher secondary stage, the student should receive a certificate from the school also giving the record of his internal assessment as contained in his cumulative record card."

The Programme of Action as formulated as a sequel to the National Policy on Education 1986 and its modified version of 1992 envisaged the recasting of the examination system to make it an integral part of any process of learning and teaching. ***"So as to ensure a method of assessment that is a valid and reliable measure of student development and a powerful instrument for improving teaching and learning."*** In functional terms this would mean:

- a) elimination of excessive element of chance and subjectivity;

- b) le-emphasis of memorization;
- c) introduction of continuous and Comprehensive Evaluation that incorporates both scholastic and non-scholastic aspects of education, spread over the total span of the instructional time;
- d) effective use of evaluation process by teachers, students and parents;
- e) improvement in the conduct of examinations;
- f) introduction of concomitant changes in the instructional materials and methodology;
- g) introduction of the semester system from the secondary stage in a phased manner and
- h) The use of *grades* in place of marks.

Prof. Yashpal in his report entitled "**LEARNING WITHOUT BURDEN**" also criticises the present system of examination for the sense of awe and fear, which these examinations generate among students and the parents as well. He mentions that educated parents, who have themselves gone through examinations and the uneducated parents, whose knowledge of the examination system is based on the social lore, share the belief that what really matters in education is the score one gets in the final examination. This belief has played havoc with the young learners. On one hand, it leads to unhealthy and cut throat competition and on the other, brings about a lot of physical and mental strain and anxiety among students resulting into numerous psychosomatic disorders.

The defects and the inadequacies of the present system of certification at the school and university level have also been highlighted by Jacques Delor in his report "**Learning : The Treasure within.**" It envisages that :

"Certification procedure should be thoroughly re-examined bearing in mind the specific conditions prevailing in each country, so that skills acquired beyond the stage of initial education may be taken into account."

The Commission states that education system must not lead to its own exclusion. Competition, which is in certain cases favourable to intellectual development, can

also take the form of undue selection by academic results. Academic under achievement then becomes irreversible and frequently leads to social marginalisation and exclusion. The effects of under achievement and academic failures aggravate the problems of socially disadvantaged young people. Under achievement and dropping out affect a very large number of young people and in turn cause a divide between two kinds of young people. “Because it generates exclusion, academic failure, is in many instances, the cause of certain forms of violence or individual maladjustment that tear the social fabric..... Countering academic failure has to be seen as a social necessity.”

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EXAMINATION REFORMS ALREADY INTRODUCED BY THE CBSE

In pursuance of the recommendations made by various Commissions and Committees as mentioned earlier, the CBSE as a pace setting National Board has been constantly making efforts to mould its examination system so as to make it a valid and reliable measure of educational achievement .

Some of the major examination reforms already introduced by the CBSE are mentioned below:

1. Development of designs and blueprints for preparing balanced question papers, for improving the validity and reliability of examination results.
2. Development and use of Marking schemes for containing subjectivity and inter-examiner variability in evaluation of answer scripts and for making it uniform.
3. Publication of sample question papers and marking schemes to familiarise the teachers and students about the nature of the questions and question papers expected in examination situations.
4. Introduction of equivalent sets of question papers for reducing chances of malpractices in the examination halls.
5. Introduction of a 9 Point scale grading system along with the numerical score to ensure a meaningful presentation of the level of performance of students.
6. Elimination of overall aggregation of marks to remove the unscientific practice of combining scores of different subjects.
7. Introduction of Spot evaluation (single subject per evaluation centre) to improve better supervision of the examiners and for bringing about greater uniformity in evaluation and making it more objective.

8. Provision of two Coordinators at each evaluation centre to ensure accuracy in the posting and transfer of marks from the answer scripts to the award lists.
9. Provision of an Additional Head Examiner at each evaluation centre to increase effective academic supervision over the evaluators and making evaluation objective.
10. Introduction of the award of merit certificate to 0.1% of high achievers in each subject for recognising excellence.
11. Introduction of Continuous and Comprehensive School-based Evaluation with the issue of an independent certificate by the Schools on a format prescribed and recognised by the Board, at class X level covering health status, school - level academic achievement, personal social qualities , attitudes and values, and proficiency in co-curricular activities. The programme will firstly elevate the status of the schools, to that of the Board in assessing a student for public consumption and secondly motivate Schools to invest labour and time for developing the diverse facets of the total personality of the students. The scheme is thus aimed at fulfilling one of the most important professed purposes of education.

CBSE'S INITIATIVES IN INTRODUCING GRADES

Considering the recommendations of the Education Commission 1964-66, C.B.S.E. was the first Board to introduce the system of declaring results in terms of subject-wise *grades*, in its examinations as long back as in 1977. But, it had to withdraw its decision, because of its opposition from the Universities about difficulties in granting admission to various courses in the absence of marks. The Examination Committee of CBSE in its meeting dated 14.11.1977 resolved that, "the practice of showing results subject wise was a progressive step and should be retained . However the minimum number of marks required to pass in each subject under All India /Delhi Secondary School Examinations to be held in 1978 onwards be laid down at 33%. This will be a transitional measure till there is greater acceptability in other Boards/Universities, institutions of higher learning and a better understanding among the teachers and the masses about the "no pass", "no fail system".

True to its resolve, the CBSE again set up the expert group to suggest methods for the implementation of the recommendations of NCERT's High level National seminar on Grading and Scaling (1987) which advocated the use of grading on a nine-point scale for declaring the results of Secondary and Higher Secondary examinations. The Expert group analysed the results of the Boards' Secondary and Senior Secondary Examinations for the preceding three years and on that basis proposed the adoption of a very simple and (Scientific) method of converting marks into *grades* in different subjects. This method is based on the assumption that in a large-scale public examination it is not possible to adopt the method of direct grading of each answer book and that the best way would be to convert marks into *grades* as is done by most examining bodies abroad.

This new grading scheme was introduced by the CBSE from the year 1988 which is still continuing. This scheme suggests that:

- a) the nine -point *grades* will be as follows:
A1, A2 , B1, B2 , C1, C2 , D1, D2 and E
- b) award of *grades* will be determined on the basis of the rank order method.

- c) the Bottom grade (grade E) will be the 'fail' grade.
- d) the criteria for fail / pass will remain as such .
- e) all those who have passed in a subject will be rank ordered and classified into eight passing grades. The first quarter (25%) from top will represent Grade A , Second quartile (i.e. next 25%) will represent Grade B, third quartile (i.e. next 25%) will represent Grade C and the lowest quartile (last 25% of those who have passed) will be placed in grade D. Each quartile will be subdivided into two equal parts thus forming into A1, A2, B1, B2 and so on .
- f) Both marks and *grades* in each subject will be shown on the certificate of the Board during this transitional period so that students do not face any hardship from some employees or higher educational institutions which might for certain reasons may still accept only marks and not *grades* for sometime. The above scheme of grading assigns grades as under :

Grades	Percentile of Student	Cumulative Percentile
A1	Next 12.5 %	12.5%
A2	Next 12.5 %	25.0%
B1	Next 12.5 %	37.5%
B2	Next 12.5 %	50.0%
C1	Next 12.5 %	62.5%
C2	Next 12.5 %	75.0%
D1	Next 12.5 %	87.5%
D2	Next 12.5 %	100.00%
E	All those who have failed (got less than 33% of marks)	

Mark ranges

In this scheme of grading, the mark ranges differ from subject to subject and from year to year for each grade. This brings the scoring of different subjects quite near to each other. If the first 12.5% students (from top) get say, 70 to 87% marks in English (87% being the highest marks obtained in that subject in a particular year) and if similar percentage of students get 90 to 100% marks in another subject (100% being the highest marks obtained in this subject), both categories would be awarded Grade A1 under this scheme irrespective of the different mark ranges. Evidently this appears to be more rational than treating them differently.

It is needless to mention that the above mentioned reforms undertaken by the CBSE have brought about considerable qualitative improvement in the examinations and education in its affiliated schools, yet there are still many concerns which are constantly causing worry. One of the important ones is the issue of declaring examination results in terms of only *Grades* without a mention of the corresponding marks obtained by a student. We propose to examine this aspect particularly with a view to completing the unfinished agenda for implementing it fully in Board Examinations.

Evaluation as a continuous process forms an integral part of the total system of education and exercises a great influence on the pupils study habits and the teachers method of instruction thereby helping to improve the level of achievement of students and not just assessing it.

The most common mode of pupil evaluation used in India is that of written examinations. In public examinations, marks are awarded and the result of the students is declared in terms of divisions, determined by aggregating the marks obtained in different subjects. The minimum level of qualifying achievement is fixed for all subjects alike and the students are required to attain the qualifying level in all the required subjects, in one go, for being declared pass. The practice has been in vogue for more than a hundred years and any departure from it is likely to be naturally looked at with awe and apprehension.

With the whole system of education being revamped and educational objectives reformulated to suit our present day needs, it has become absolutely essential that the examination techniques be also modernised.





SUPPORTING RESEARCH EVIDENCES

An important purpose of examination is to differentiate between students of different abilities on the basis of their performance. Through the system of marks we classify students into 101 'ability' groups when the result is announced in terms of marks in a '100 mark' question paper. When marks are used as a criterion for selection, there is an implicit assumption that the student getting 60 marks is superior to the one getting 59 marks. Similarly if a student gets 100 marks in Maths, should we assume that he knows everything about the subject. The Research in examinations (A.E. Harper Jr. & V.S. Mishra 1976) has demonstrated the alarming phenomenon of inter-examiner variability through a statistical study. Taylor in his study 'An examination of examiners' 1962 affirms that "an examination has neither the sanctity nor the precision which is usually attached to it." Taylor got the scripts of 45 students in English, Economics, History, Logic and Mathematics independently marked by the two examiners. The highest difference between mean was found in Logic where the mean mark of one examiner was 55.8 and that of another examiner 46.0. The lowest difference between mean was found in History when the mean marks varied from 40.4 to 39.3. The highest difference in standard deviation was again in Logic where Standard Deviation varied from 18.0 to 10.8.

Reliability studies of examination marks by Harper have shown that the Standard Error of Measurement (SEM) in a 100 mark paper is usually between 5 and 15 depending on the subject, type of question paper and method of marking. If SEM is 10, then for a student whose true marks are 55, the chances are 2 out of 3 that his true score (actual marks) could be anywhere between 45 and 65. Thus examinations are far from being instruments that are sensitive enough to judge students ability accurately on a 101 points scale.

It is also not justified to add the marks of different subjects to arrive at a total score of the students. Since the marks of different subjects are on different scales and also measure different attributes, their addition amounts to totalling of the quantities which can not be added.

H.J. Taylor in this connection has observed that:

“such totalling of marks is analogous to adding air pressure, temperature and humidity and then supposing that the sum of these numbers is descriptive of weather.”

Further more crucial decision of passing or failing a student, are normally based on a cut score of 33% or 35% which by itself is arbitrary like the good-for-all-time cut scores for division.

To overcome well-known shortcomings in the use of marks, it is proposed to use *grades* instead of marks for declaring students' result in Boards examination. This, however, does not mean that marks should be done away with completely and *grades* should be used even in marking answers to various questions in a paper. Marking system may continue as it is. Only the marks should be converted into *grades* in such a way that they define relative levels of achievement of students uniformly for all subjects.



TYPES OF GRADING

Grading is basically of two types . One is 'Direct Grading' where *Grades* are awarded directly to an individual or group of exercises as an indicator of their quality.

For deriving an overall indicator *grade* Point Average (GPA) is calculated . The other is 'Indirect Grading' or grading through marks. In this case marks as usual are awarded to different exercises and the total score is converted into a grade. This determination of a grade through marks again assumes two forms . In one case *grades* are derived through "absolute scores" and in the other through "relative marks". Relative scores are the scores/marks obtained by a student in his group and indicate his placement in the group. They also ,thus, take into account the variation in the standard of question papers, as also that of the standards of marking by different examiners. This is the type of grading considered suitable for external public examinations.

In Direct Grading individual questions are awarded *grades* by the evaluators. Direct grading is normally done when the number of questions in testing situations are few and when the number of students are also few. Evaluation within a class provides an appropriate situation for Direct Grading. This method can be employed for the assessment for the both cognitive and non-cognitive outcomes. But it is preferred mainly for the assessment of non-cognitive learning outcomes. In the method of Direct Grading the inter-examiner variability is minimum.

Grading based on absolute Marks

The award of distinctions, divisions and the determination of pass and fail on the basis of pre-determined boundary scores are examples of grading based on absolute marks. It is, however, likely in such a situation that students may not be able to get A *Grades* in some subjects and more students may get A *Grades* in other subjects because of the varying ranges of marks.

Despite its short comings, the practice of awarding *grades* through direct conversion of marks has its own advantages. Firstly , the procedure is simple and straight

forward to use and secondly it indicates the level of performance of the student himself without any reference to the group.

Grading on the basis of relative marks :

It involves the conversion of marks into *grades* on the basis of the rank order of the scores. It takes into account the distribution of scores for determining the range of marks (boundary scores) corresponding to different *grades* as per approved procedure. Some students through this system would always get high *grades* in all the subjects unlike the situation of grading on the basis of absolute marks. In fact when we talk of grading in public examination, it is grading on the basis of relative marks, the one proposed to be used in the present context.

Grades on the basis of relative marks do not, however, provide any single over-all indicator of the level of performance of a student, like the total of the aggregate marks. Consequently preparation of a merit-list for purposes of a certain awards or selection to a job or admission to higher courses or for awarding scholarships becomes quite cumbersome. Thus it provides resistance to change by those who are accustomed to the traditional approach of ranking through marks.

The Scale To Follow

Various expert committees that have deliberated on the issues of grading in depth and detail, they are all unanimous about the use of a Nine point scale as spelt out below :

- a) The Barrow Committee (1981) suggested a nine point scale for grading .
- b) The National Seminar on Scaling and Grading organised by the NCERT in July 1987, as a follow up of the directions of the NPE 1986/92 endorsed the recommendation of the Barrow committee about the use of a nine point scale for grading pupil performance. The Seminar also recommended an academically sound and practically feasible strategy.
- c) The Ninth Conference of the Chairman and Secretaries of the Boards of School Education organised by the NCERT in August 1990 also supported the use of a nine point scale in examinations.
- d) The Council of the Boards of School Education has also endorsed the use of a nine point scale.

The CBSE, therefore, proposes to accept the recommendations of these esteemed bodies and adopt the use of a Nine Point Scale for Grading pupil performance.



RECOMMENDATIONS OF NCERT'S NATIONAL SEMINAR ON SCALING AND GRADING (JULY 22-23,1987)

A. On improvement of Question Papers:

1. As a pre-requisite for introduction of Scaling and Grading , the Boards should further improve the quality of question papers set in the examinations. The structure of the question papers should be such that due weightage is give to the different areas of content and different instructional objectives. The questions should be such that they test the different abilities with a high degree of reliability and validity. The question papers may consist of the following four types of questions.
 - a) Objective type
 - b) Very short-answer type
 - c) Short answer type
 - d) Essay type

While there may be fixed number of questions of the objective type to be answered in a separately allocated time span, the number of questions of other types could vary from question paper to question paper.

2. All questions should be compulsory and no options should be allowed .
3. Question banks in the different subjects should be developed and updated from time to time. Questions found suitable after item analysis may be stored for further use in these banks. Question papers should be set using these questions after proper moderation by teams of subject experts.

B. On marking of answer-scripts

4. Efforts should be made to minimise the inter-examiner variability when the different sets of answer scripts of the same question paper are evaluated by different examiners. For this, the Boards should constitute Coordination

Committees of examiners in each subject to discuss the details of marking each question and to evolve a comprehensive marking scheme for the whole question paper.

5. To arrive at a consensus on the marking system, the Boards should make photocopies of 15-20 answerscripts in each question paper (representing a wide range in the quality of answers), and get them examined by different examiners. These should be the basis for developing a uniform marking scheme by the Coordination Committee.
6. There should be some minimum norm for the selection of examiners. They should be trained in evaluating answer-scripts before entrusting them with the actual examination work. Examiners found to “depart” widely from the established forms should be dropped.
7. Examiners should be instructed to score answers using the entire range of marks (from zero to the maximum) on each question. The tendency to restrict scoring to a narrower range of marks in certain subjects and a wider one in others should be avoided.
8. There should be no pre-determined pass marks or fixed cut-scores for the different classes/divisions. Examiners should be instructed to award marks without any consideration of pass-fail, division or distinction .
9. The practice of grace-marking should be avoided altogether.

C. On distribution of answer-scripts among examiners

10. While it is expected that the above measures will bring about greater uniformity in the marking standards of the different examiners, some variability will still remain for which Boards should use suitable scaling methods. Since there is usually considerable variation in the average level of examinees of the different institutions/ Centres, it is necessary to distribute the answer-scripts at random among the examiners (before applying any scaling method) to remove inter-examiner variability.
11. Where the answer-scripts are marked centrally at one place, the Boards should ensure that the answer-scripts from each examination centre are

divided into smaller lots, which are then distributed among the examiners at random.

12. When fictitious roll numbers are allotted to answer-scripts, these numbers should be chosen at random using a computer or a table of random numbers or the procedure used by H.J.Taylor at Gauhati. This will ensure completely random allocation of answer-scripts among the examiners.
13. In the case of Boards which have a very large number of examinees, if the procedures suggested above are not found to be practical, the answer – scripts of each examination centre should be divided into bundles of 20 to 25 and each bundle should be given for evaluation to a different examiner. Each examiner will thus receive a random lot of 10 to 15 bundles of 20 to 25 answer-scripts from different centres.

On scaling of Marks

14. When some randomisation is ensured in distribution of answer –scripts, it is possible to apply a suitable scaling method to remove inter-examiner variability. The method of mean standard deviation scaling is recommended for this purpose. All the examiners should be asked to report the profile of their marks, that is, frequency distribution, mean and standard deviation (s.d.) of the marks awarded by them. However, if a central computer can be used to provide this statistical information for the marks awarded by each examiner, the individual examiners need not submit their marks profile.
15. Decision about scaling the marks of any given examiner should be taken on the basis of the Mean and Standard Deviation of the marks. In case the mean and s.d. of an examiner do not differ significantly from the overall mean and s.d., there is no need to scale the marks awarded by him. But in case the difference is statistically significant the mean standard deviation scaling should be used.
16. The results should be announced in the form of a subject-wise achievement profile in terms of *grades* for each student. Composite scores (aggregate marks and categories /divisions assigned on that basis) should not be reported in the individual result cards or certificates.

17. The present practice of using aggregate total marks/divisions for admission to colleges/universities or other institutions of higher education or for awarding scholarships, should be discontinued. In view of the high fallibility of such marks, the concerned institutions should develop their own criteria or tests for selection, in case the subject-wise achievement profile in the form of *grades* is not found adequate by them for the purpose.

F. On Grading

18. For the declaration of results, the Boards should adopt a nine-point grading system in each subject. Letter *grades* (A,B,C,D,E,F,G,H and I) should be used to represent the nine points. There should be no overall composite grade and no aggregate marks or division.
19. Individual questions should continue to be marked on a numerical scale as at present , but the total score in any subject should be converted into letter *grades*, A to I . The range of marks and cut scores for the different *grades* may be decided on the basis of the actual distribution of marks in each paper in the Board examination of at least previous three years. Thus the range of marks corresponding to any letter grade in a subject is likely to vary from year to year.
20. The *grades* of internal evaluation and external examination in any subject should not be combined but reported separately. This also applies to *grades* in Theory and practical examinations.
21. There should be no re-conversion of *grades* into marks for screening candidates for admission or any other purpose.
22. Students should be provided an opportunity to improve their *grades* in subsequent examinations. They should also be allowed to clear the examination in parts(subject –wise) within a period of five years.
23. *Grades* should be awarded in non-scholastic areas also, following the nine-point grading system . These *grades* should be recorded on the certificates to be awarded to the students, along with the *grades* in scholastic subjects.
24. The new system of grading should be introduced by all Boards at the end of class X with effect from 1990 and at the end of class XII with effect from 1992. A public declaration to this effect should be made well in time so that

universities , colleges and other institutions/organisations which use marks for selection , may take appropriate action to develop their own selection criteria, if necessary.

G. On the preparatory work for implementation

25. NCERT should accord priority to training in implementing the grading system of all those persons whose services are to be utilised as paper setters, moderators, examiners, statisticians and administrators by the Boards.
26. Manuals should be prepared by NCERT for the use of the Boards giving details of various procedures to be followed and describing the methods of scaling and grading to be applied in a simple manner without sacrificing their technical soundness. Also suitable manuals may be prepared for teachers to help them in Comprehensive and Continuous School-based Evaluation of Students ' performance, proficiency and competencies .
27. To ensure that various Boards introduce the changes in their examinations simultaneously, a meeting should be organised of the representatives of all the Boards by COBSE and NCERT to seek their consensus and commitment on implementation of the accepted reforms.
28. It will be necessary to conduct research studies , which should have sound research design. They may be undertaken by NCERT or farmed out by it to others. Adequate financial and other support should be provided for these studies.
29. Since most of the concepts(e.g. use of subject –wise *grades*; abolition of the pass-fail system and the award of overall division) are new and the proposed changes are radical in nature, it is necessary to mobilise the public opinion in their favour before introducing them. This should be done by using the mass media (e.g. newspapers, radio, television) effectively.
30. A lot of preparatory work is needed to implement the proposed changes in the examination system. A small committee of experts, policy makers and representatives of a few Boards should be set upto prepare a detailed plan of action and to provide guidelines for the activities to be undertaken for effective implementation of the proposed reforms of scaling and grading in the Board examinations.



CBSE'S PRESENT PROPOSAL

With a view to implementing long standing recommendations of different Committees and Commissions , the CBSE has decided that

- A student may clear the class X examination in parts(within a specified time) instead of doing so in one stroke.
- The result of class X examination, in the Board's certificate may be indicated in terms of subject-wise *Grades* on a nine point scale.
- No student , who does not attain the qualifying level, in all the subjects, in one stroke, shall be declared a "failure" but issued a statement of "*grades*" obtained by him in the subjects in which he has attained the qualifying level.

The proposal is expected to

- minimise the stress and strain of the students at examination time, as also the examination load and enable him to proceed at his own pace;
- substantially contain the wastage of national resources currently occurring due to about 55% of failures in examinations, who are also taken as potential failures in life;
- reduce the motivation for indulging in unfair means;
- remove the disability of the students not qualifying in all the subjects, in one go, from taking up jobs or joining courses of higher education, if they meet the basic requirements;
- bring in 'equity' in examinations through the proposed flexibility because most of the failures hail from the deprived sectors of the society.

The move is only a step forward in the chartered direction of Examination Reform for which other preparatory steps mentioned earlier have already been introduced by the CBSE, like those for improving validity and reliability, by reducing subjectivity and introducing uniformity in evaluation, for ensuring accuracy in the processing of results etc-etc.

The proposed reform is only different from the current practice in so far as the results henceforth are being proposed to be declared as under :

- Only in terms of, subject wise *grades* without giving corresponding marks and
- The issue of a statement of *grades* in the qualifying subjects, without the need for clearing all the required subjects in one go and as
- Without mentioning students as having passed or failed.

These reforms are in perfect conformity with the recommendations of different Committees and Commissions and even the NPE 1986/1992 where the issue was subjected to a nation wide debate for reaching the conclusion about replacing Marks with *Grades*.

The main reasons for the introduction of *grades* in place of marks is

- that *grades* avoid, in a substantial measure, the possibility of misclassification of students into different categories of attainment levels.
- that they take into account the variations in the difficulty level of the question papers in different years in different subjects in a particular year and in the standards of valuation of scripts by different examiners.

CBSE 's Proposal – Its advantages

As compared to the present scene when the students are required to attain a qualifying level in all the required subjects of study in one stroke, the CBSE has for the convenience of the students decided that they could accomplish this in parts. Such a provision will naturally reduce the stress and strain of the students and finally the fear of examinations. A natural outcome of this situation will be a substantially reduced motivation for attempting malpractice and the use of other unfair means.

The most important of the outcomes of this proposal is that it would positively and constructively contain the quantum of wastage in education which the country can ill afford. As we know, the over-all pass percentage of students at class X level in the country is around 45% which means that 55% students fail. This enormous group is dubbed as failure because they are unable to attain the qualifying level in all the required subject at the same time. Traditionally, they are also not only treated as failures in examinations but as individuals unfit for any successful venture in life. The expenses on infrastructure and other financial inputs on a quantum of more than half of the students, therefore, go waste. The CBSE's proposal attempts to stem this national wastage and also adds to the aspirations and hopes of the students.

As the failures in public examinations are much higher in the schools catering to the disadvantaged sections of the society and lower income groups, the current practices also in one way support and aid the goals of social equality and equity. The new proposal both in letter and spirit is aimed at ensuring these fundamentals criteria enshrined in our constitution.

While it is intended to carry forward the proposal to the Higher Secondary Stage as well , a start has been consciously and deliberately made at the secondary level particularly because it is considered to be terminal stage of education, for entering life for a very large proportion of students. Furthermore, this stage also caters to the needs of general education as stipulated by all our educational policies.

Finally it also deserves to be emphatically stated that the CBSE has already introduced all other preparatory measures for the introduction of *grades* of which the use of designs and blue print in the framing of Question papers, the preparation / discussion and use of marking schemes for the evaluation of scripts , mechanical processing of scores, are some of the main ones. The CBSE has also introduced the declaration of results in terms of *grades*, of course supplemented by the marks.

All this is, by itself, adequate preparation for the declaration of results exclusively in terms of grades without reference to marks and the declaration of students as having 'passed' or 'fail' .

The CBSE has, in-fact, been taking decisions about reforming examination in a comprehensive manner by stages. The introduction of a certificate of Continuous and Comprehensive School-based Evaluation is yet another major step in this direction through which an attempt has been made to cover those important aspects of personality which are not possible to be covered through external examinations. Furthermore , the footnote in the certificate of the Board that the certificate of School –based Evaluation may also be taken cognisance of for judging the total personality of the students gives official recognition and authenticity to the school certificate.

The introduction of grading and that of CCE make implementation of recommendations of so many Committees and Commissions as also carry with it the National Policies on Education.

The proposals while fulfilling the academic requirements will also go a long way in benefiting the interest of the students and those of the society.



RESOLVING DOUBTS AND APPREHENSIONS ABOUT GRADING

Whenever any new change is introduced in any system, there is a natural resistance against it. The degree of opposition is greater if the old practices have been in vogue for longer times. The change-over from marks to *grades* as a means of presenting pupil performance and proficiency is one such shift of emphasis. We have been using marks now for more than a century and, therefore, a change-over from marks to *grades* is not just an academic or an administrative deviation but a cultural change.

In such a context, the change to be introduced has to be well understood and appreciated by everybody concerned. In case of examinations, this also includes the public at large and therefore, the effort at converting them, to the new ideology has to be subtle and convincing. Some commonly raised doubts and apprehensions are being taken one by one and attempted to be answered.

1. The assessment of the performance of students in terms of *grades* is vague and that in terms of marks it is more exact and accurate.

As we know, we use marks on a 101 point scale and state the performance level of the students in terms of marks, at a particular point on this scale. But can we vouchsafe about that definite accuracy of the award of a particular mark to a student and not one mark less or more, which may make or mar his future prospects and life, as in case of those getting 59 or 60 marks. Grading, on the other hand, offers a range to classify students within them. These *grades* are much lesser in number (say 3 point, 5 point or 9 point) than the 101 point scale. The chances of placing a student in the slot /range of a grade is, therefore, not likely to suffer from the same degree of shortcoming of misclassifying the students in one grade or another, as is possible in a greater degree in case of marks where there may not be hardly any significant difference in the ability of the two students getting 59 or 60 marks and getting classified into two divisions. *Grades* thus are likely to be less wrong than marks in any case.

2. Grading is too complex and cumbersome a process to introduce

This certainly is not so. The only required thing is a mind-set, as most of the other things are done by the computers. In course of time everybody is likely to get used to it.

3. Introduction of grading gives impetus to favoritism and corruption.

In external examination situations an individual student's *grades* will depend upon his performance in examinations and marks will be awarded as usual. Thus question of any corruption or favoritism will therefore not arise.

4. Grades have a broader base of subjectivity than marks :

In fact subjectivity does more harm when marks are given than in situation where *grades* are awarded. A small degree of subjectivity in respect of even a single mark as stated above, can create great havoc. In fact the range of operational subjectivity, however, gets narrowed down when *grades* are awarded. This is so because it is more difficult for subjectivity to operate in such a gross manner, as to shift the placement of a student from the wide range of one grade to another.

5. The determination of the boundary scores for the different grades is arbitrary

This certainly is not true in view of the well defined rules and procedures of an examining agency - the Board/ University in this regard. When *grades* are to be awarded the boundary scores used year after year are not the same, as in case of divisions and are statistically determined for each examination in every subject. Some adjustment are also sometimes made on the basis of experience and the distributions of marks previous years.

6. The presentation of the performance level of the students in terms of percentage of marks is more reliable and valid than when it is presented in terms of Grades

'Validity' means accuracy and 'Reliability' means dependability. In view of the explanation in the earlier paragraphs reliability and validity are under threat when marks are used. When we award marks we feel that the students can be categorized into 101 categories though we may not be able to discriminate

between any two closely situated ones. When *grades* are used such a distinction can surely be made dependably and accurately.

7. Marks obtained by the students are a better indicators of the performance of the teachers.

This certainly is not true as *grades* are equally powerful instruments as marks in judging not only the performance of the students but also that of the teachers.

8. The introduction of grading will dampen the spirit of competition and acquisition of excellence by the students and will make them complacent

This, most certainly is not likely to happen because the students will always be striving to attain higher level of achievement and consequently higher *grades*.

9. The need for changing over from marks to *grades* can not be justified

We have been using marks and the boundary scores for determining pass/fail or divisions in a perpetual and a sacrosanct manner. These levels of 33%, 45%, 60% and 75% have been used year after year, examination after examination and above all, in all the subjects alike. When we use marks we do not take cognizance of variations in the difficulty level of the question papers in different years, the ranges of marks obtained by students in different subjects, and the variations in the student groups at different times and in different locations.

In fact we take for granted that 50% marks have the same value in different subjects, in different examinations, in different years and so on. This can certainly be questioned even by a lay man.

Grades on the other hand take care of these variations and the students are not allowed to suffer because boundary scores for different *grades* are scientifically determined on the basis of established statistical procedures and even moderated on the basis of distribution in previous years.

10. With the use of *grades* no student will be declared as a failure and everybody irrespective of his level of achievement will be declared as having passed.

This, however, is not the case at all. It is not that nobody shall fail, but that nobody shall get a stigma of having been declared as a failure.

Every student has to attain the minimum required level of achievement and he will be awarded a statement of *grades* in which-ever subject he attains the minimum level. He could clear all the subjects or do that in parts or try to improve upon his *grades* within a given time frame.

Necessary rules and regulations about this will, however, have to be formulated through a careful analysis of various pros and cons of implementing the new system.

11. *Grades* are not useful for being used for granting admissions, scholarships and for the award of medals, prizes and etc.

This is true. But this shortcoming is more than compensated by the many advantages which the use of *grades* in place of marks yield.

It deserves to be pointed out in this connection that the CBSE has also introduced a system of Continuous and Comprehensive. School-based Evaluation, in the certificate of which the school level performance of students in different subjects is one of the aspects included. The employers or the institutions of higher education could surely make use of these for their respective purposes.

Concluding Observation :

Even though, the replacement of the system of using marks by *grades* is supported by research studies and has also been recommended by various Committees and Commissions including the National Policy of Education, the fact remains that we have been using marks for quite sometime and for changing-over to *grades* we will need mental preparation also besides other things.

In this context, it is necessary to create a favourable public opinion and a conviction amongst the various functionaries. It is, therefore, desirable that a series of meetings with parents, teachers, educational administrators and others may be organised for convincing them about the value of this change. This step will naturally smoothen the process of implementation by containing reservations and opposition.

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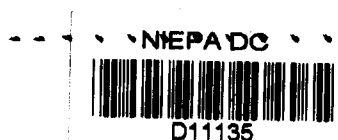
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Central Board of Secondary Education
Siksha Kendra, 2, Community Centre
Preet Vihar, Delhi - 110092, India

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Fax : 91-011-2215826

E-mail : cbs.ed@nda.vsnl.net.in

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