

# **EVALUATION IN ELEMENTARY TEACHER EDUCATION**

Report of the Committee on Streamlining Procedures and Practices of  
Evaluation in Elementary Teacher Education Programme



**National Council for Teacher Education**

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## FOREWORD

Having realised that 'Evaluation' is one of the weakest components of both the content and transaction of Elementary Teacher Education programmes, the National Council for Teacher Education (NCTE) constituted a Committee for suggesting ways and means for redesigning the evaluation paradigms, procedures and practices in the professional preparation programme of elementary school teachers.

The Committee has meticulously dealt with two main facets of Evaluation in Elementary Teacher Education:

- Evaluation of Teacher Trainees in different components of elementary teacher education programme.
- Preparation of Teacher Trainees for becoming effective evaluators of pupil growth.

The indepth study of the prescribed curricula for elementary teacher education courses in different states made by the Committee has enabled it to reach valid conclusions for making concrete and down to earth recommendations. The wide-spectrum inputs received in the course of the National Level Consultation meet have also greatly helped in further enriching the report.

The report embodies valuable insights in the emerging new knowledge structures in the domain of pedagogy and concerns for an implicit need for modification in procedures and innovative directions for practices of Elementary Teacher Education. I am confident that the contents of the report will prove to be of immediate use to teacher educators and the state level agencies controlling elementary teacher education programmes and help in introducing valuable reforms for rejuvenating elementary teacher education.

The report, in fact, is the second document in the series. The same Committee had earlier worked on Evaluation in Secondary Teacher Education, the report of which was published by the NCTE in 2005.

I am thankful to Prof. B. P. Khandelwal (former Director, NIEPA and Chairman, CBSE), Prof. H. S. Srivastava (former Dean, NCERT) and Prof. G. L. Arora (former Head, Department of Teacher Education, NCERT) for their painstaking efforts in the preparation of this valuable report. Thanks are also due to Prof. S. C. Sarma (former Professor & Head, Department of Education, Andhra University) for his valuable inputs in earlier part of the Committee's deliberations.

Mrs. Meena Gautam, Deputy Secretary and Mr. Mrityunjay Jha, Under Secretary in the NCTE, who acted as Conveners of the Committee, also deserve our thanks.

**New Delhi**  
**December 17, 2007**

**(Dr. Shardindu)**  
**Chairperson**  
**NCTE**

## PREFACE

I deem it to be a very thoughtful and a foresighted decision of the NCTE to constitute a Committee to deliberate on crucial issues related to Evaluation in Teacher Education Courses, particularly because evaluation undoubtedly is the most important quality control device for the content and process of teacher education. The current effort of the Committee on Evaluation in Elementary Teacher Education, supplements its earlier work on Evaluation in Secondary Teacher Education.

The report is an outcome of intensive and extensive work of the Committee consisting of the detailed study of the syllabi of D. Ed. courses of different states, elaborate in-house discussions on different quality issues and a wide ranging consultations with teachers, teacher educators and educational administrators. The inputs from the National Consultation Meet were indeed very useful in clarifying and crystallising the ideas. Some of the important ones even though part of recommendations could be mentioned here as well.

- A Comprehensive Policy Statement on Teacher Education needs to be prepared by NCTE with cues from NPE 1986.
- A Compulsory Foundation Course on Educational Evaluation be introduced along with related practical work.
- Concrete guidelines for various aspects of evaluation be prepared by the NCTE in the form of a Handbook on Evaluation.
- Practice teaching may be assessed only internally.
- In the scheme of evaluation, those aspects which are important but cannot be assessed externally, may be evaluated internally. Assessments done internally and externally should be shown separately.
- Information Technology be increasingly used in the conduct of teacher education courses.

I am convinced that the recommendations, made by the Committee, having been duly vetted by both – theoreticians and practitioners, are technically sound and practically feasible. In this context, it deserves to be mentioned that the reasons, implications and the likely impact of each recommendation were duly taken into consideration. It is this that makes me fully confident that the implementation of the recommendations made is likely to go a long way in streamlining elementary teacher education as such, through the improvement of evaluation strategies.

I cannot but be thankful to Prof. H. S. Srivastava and Prof. G. L. Arora for the extensive work they have done for bringing the report to its present form. Prof. S. C. Sarma's valuable inputs in the earlier phase of the Committee's work deserve to be acknowledged with thankfulness.

Mrs. Meena Gautam, Deputy Secretary and Shri Mrityunjay Jha , Under Secretary of NCTE, who acted as Conveners deserve profuse thanks for providing the necessary administrative support to the Committee. Miss Sarika, Mrs. Dinesh Kumari and Mrs. Sunita Sharma, who did the typing and retyping of the report also need to be thanked for their diligence and patience.

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**New Delhi**  
**December 17, 2007**

**B. P. Khandelwal**  
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# CHAPTER 1

## INTRODUCTION

### 1.1 Background

Examination Reform Programme was formally launched in India in 1958 by the All India Council for Secondary Education, the agency established by the Govt. of India, for implementing the recommendations of the Mudaliar Commission.

When, with the merger of a number of erstwhile units, the NCERT was established in 1961, it inherited the programme which since then, has been ferried from within the NCERT. By now, the suggestions of the NCERT regarding examination reform have been implemented by all the states particularly by the State Boards of School Education which set goals and present models for the content and process of education at all the lower stages of school education.

While several measures of examination reform were suggested and implemented earlier, it was the first formally enunciated national policy on education in 1968 which stipulated that **examinations be so improved as to become valid and reliable measures of pupil growth and powerful instruments for improving teaching and learning**. As a follow up a number of programmes were launched for implementing the pithy statement that meant many things. The NPE 1986/92 was, however, more detailed and concrete when it suggested elimination of subjectivity, de-emphasising of memorisation, continuous and comprehensive evaluation covering both scholastic and non-scholastic aspects of pupil growth, introduction of semester system, use of grades in place of marks and improving the management of examinations. These provisions were attempted to be reflected by both the subsequent national curriculum frameworks of 2000 and 2005.

In regard to educational evaluation, the recent most national curriculum framework of 2005 and its preparatory exercise by the focus group on examination reform have reinforced the already made recommendations by reiterating them viz. (a) the improvement of the quality of questions in question papers by devoting special attention to the testing of higher mental abilities; (b) soliciting questions from a wide variety of sources; (c) try out of questions before incorporating them in question papers; (d) introduction of continuous and comprehensive evaluation by moving beyond the cognitive domain, (that is, the coverage of both scholastic

and co-scholastic aspects of pupil growth); (e) training of teachers, paper setters and examiners in the concept and techniques of evaluation and enhancing their remuneration; (f) declaration of internal and external evaluation results separately; (g) offering flexibility in clearing examinations in parts; (h) exploration of possibilities for introducing open-book and on-demand examinations; (i) introduction of relative grading (and not absolute grading); (j) introduction of examinations at different levels in subjects with high incidence of failures; and (k) no public examinations at the school stage except in classes X and XII.

## **1.2 Teacher Preparation in India**

Teacher Preparation programmes in our country broadly correspond to sub stages of school education, namely, pre-school stage, elementary stage and secondary stage. These programmes are offered in separate institutions, which are affiliated to different examining bodies. In the case of the secondary teacher education programme, normally the Universities design and prescribe curriculum and conduct examination for certification. In the case of pre-school and elementary teacher education programmes, functions relating to curriculum development and conduct of examination leading to certification, are performed by different agencies of state governments like SCERTs, Directorates of education, or State Boards of School Education.

## **1.3 Evaluation in Elementary Teacher Education**

The effectiveness of teacher preparation programme, like any other professional programme, depends on several factors such as suitability and relevance of its curriculum and effectiveness of its delivery in the institutions. But, the way the trainees are tested during and at the end of the course, remains the most important element of the entire teacher preparation programme, as it is expected to ensure the reliability and validity of certification on the one hand, and on the other it has the potential to influence the mode and style of curriculum transaction in institutions.

In view of the power and potential of evaluation system, it becomes imperative to streamline it at every stage of teacher preparation. Like any other stage of teacher education, curriculum of elementary teacher education is also broadly divided into three components namely, (1.) Theory of education, (2.) Practice of teaching and (3.) and Practicum (Project work, Sessional work, Co-curricular activities.) The scheme of evaluation should assess

trainees' performance in all the three components of the teacher preparation programme. The weightage for each component in the overall scheme of evaluation should, by and large, be in conformity with the importance it has in the professional life of a teacher. The trainees' evaluation of teacher trainees should lead to accurate and just certification. The level of trainees' performance or success in different components of the programme indicated in terms of marks or grades in the certificate should truly reflect their understandings, skills and competencies for executing the various tasks that a teacher is called upon to perform in schools. For example, a student getting a first division in the 'Theory' component should not only demonstrate abilities related to the understanding of the content of various theory courses but the capability for using it in professional discharge of his duties as a school teacher. It should also appropriately reflect on the usefulness and applicability of the content in the day to day life of a teacher. Like-wise, a first division in the practice teaching component should be indicative of a high level of mastery over the subject matter and teaching competencies; ability to evaluate and further improve upon the performance levels of pupils, as also the ability to motivate pupils and communicate effectively. The level of performance in the 'practicum' component should reflect the trainees' possession of organisational skills and the ability to work in teams.

The analysis of syllabi of elementary teacher education, in different states has revealed that they follow almost a similar pattern of evaluation. The evaluation of theory component is aimed at assessing the trainees' knowledge, understandings and the ability to make use of theoretical understandings to address day-to-day concerns in the life of a teacher. But in practice, the examination of theory courses tends to over emphasise the testing of memorisation. The style and language of questions very often is such as encourages memorisation without understanding. Moreover, the assessment is, by and large, subjective and hence lacks objectivity and reliability. The present report attempts to present concrete suggestions for overcoming these shortfalls.

The situation in the case of the assessment of proficiency in teaching is no better. The lessons taught by the trainees are not observed by their supervisors regularly and seriously, criticism lessons of the trainees too are commented upon very casually and in the final examination, the observation of lessons by the external examiners for 10-15 minutes, is by no means systematic and against any properly laid down criterion of effective teaching. It is, by and large, impressionistic and therefore it lacks objectivity. Sometimes, the system is not transparent and is often vitiated by subjectivity and favouritism. The result of this type of

assessment is hardly indicative of the trainees' performance and teaching competence. The report also presents the concept of TPI (Teaching Proficiency Index) for overcoming these shortcomings.

The trainees' participation and proficiency in various cocurricular activities like debates, literary contests, cultural activities, games and sports, excursions, etc. and organisation of these activities are also taken cognisance for the final assessment of the prospective teachers for certification. The assessment of this component is internal and is generally done by the faculty on a 5 point rating scale. It has been observed that these assessments are, by and large, impressionistic, subjective and without a systematic plan.

#### **1.4 The Committee on Evaluation in Elementary Teacher Education**

The concerns mentioned above have been the subject of discussion in numerous fora like seminars, workshops, etc. which have led to only minor modifications here and there. Taking cognisance of the concerns and in order to evolve a comprehensive proposal for streamlining the evaluation procedures in elementary teacher education, NCTE decided to constitute a committee of experts with the following terms of reference:

- To study the existing content, procedures and practices of evaluation in elementary teacher education courses at different levels
- To evolve a framework of educational evaluation for different programmes of elementary teacher education.

A copy of the office order constituting the committee is given at Annexure-I.

The committee procured the syllabi of elementary teacher education programmes in vogue in different states being run under different nomenclatures such as D.Ed, BTC, ETE, JBT, etc. The evaluation schemes incorporated in the syllabi were critically examined to determine the weak and strong points and to identify the gaps as well as innovations, if any. In addition, the committee decided to prepare case studies in respect of a few states, namely, Assam, Uttar Pradesh, Haryana, Karnataka and Maharashtra.

The analysis of syllabi revealed that while the suggested scheme of evaluation stands divided into the usual three major components of the elementary teacher education programme, namely, Educational Theory, Practice Teaching and Practical Work relating to Co-Curricular Activities, the aspects related to the three components vary widely in regard to their content

and nature. The committee, therefore, decided to take note of the commonalities as well as differences of the three components for evolving a framework of evaluation.

### **1.5 Basic Parameters of Evaluation**

Before initiating work on the development of an evaluation framework, the Committee decided to set the parameters for the proposed framework. The Committee was convinced that clarity as well as consensus on the parameters and guiding principles was essential to provide proper direction to its work.

Although 'Continuous and Comprehensive Evaluation (CCE)' has been a buzz word in educational evaluation for quite sometime and its soundness and necessity is not in question, yet it requires not only reiteration but also some elaboration, specially in the context of the teacher preparation programmes. The assessment of student teachers' understanding of educational theory through written examination, at the end of the academic session does not provide adequate evidence of their attained achievement levels. Formative evaluation should form an integral part of the teaching-learning process and therefore evaluation automatically ought to take place everyday in every classroom alongwith teaching. The teacher must maintain a complete record of the ongoing as well as periodical assessment and give it due importance as part of the terminal assessments. The other component of teacher preparation programme, viz, the practice teaching and the practicum, also require continuous assessment during the entire span of the programme. The comprehensiveness of evaluation entails assessment of students' growth in all the domains of development, viz. cognitive, affective and psychomotor. In addition, in the specific context of teacher education it implies assessment of not only student teachers' knowledge and understanding of the theory and practice of education but also the possession of professional proficiencies and competencies including soft skills in teaching, classroom management, participation in and organization of co-curricular activities as also those of evaluating pupils.

The system of evaluation, CCE or otherwise, has but to be based on certain principles, such as minimization of subjectivity and maximisation of objectivity to the extent possible, transparency in both internal and external assessment, assessment against pre-decided criteria in different components of teacher preparation programme and last but not the least, the principles of reliability and validity.

In order to evolve an evaluation system on the basis of the above mentioned principles, the Committee felt that the present system of marks involving a 101 point scale should be replaced by grading, and written examination should be supplemented by oral and practical examinations, impressionistic evaluation of teaching skills should be replaced by the criterion (teaching proficiency) based assessment, and the casual approach to assessment in the practicum component should be replaced by assessment based on a series of systematic and carefully recorded observations. Above all, the student teacher must also be adequately prepared for evaluating pupils comprehensively and continuously for further improving the levels of their achievement and proficiency.

### **1.6 Organisation and Presentation of Evaluation Framework**

The draft framework evolved on the basis of the above mentioned principles was discussed in a National Consultation Meeting attended by a group of teacher educators, evaluation experts and educationists. The draft framework was further modified in the light of inputs of the deliberations of the consultation meet. The evaluation framework in respect of the educational theory, practice teaching and practicum is presented in chapters 2-5.

One of the functions of any teacher education programme is to prepare the prospective teachers for evaluating pupils' performance and achievements in schools for which an independent compulsory Foundation Course on evaluation is included in the educational theory courses. A unit on evaluation is also included as part of the methodology courses in the teaching subjects, namely, the subjects which a teacher is called upon to teach in schools. In addition to teaching the theory of evaluation, the prospective teachers are also provided opportunities to gain competencies in the construction of objective based tests, items of different forms, preparation of balanced question papers and evaluating answer scripts. The Committee decided to examine the existing provisions aimed at preparing the prospective teachers for pupils' evaluation in schools in order to identify the gaps or its weaknesses and to suggest measures for further improving this aspect of teacher preparation. The Committee's viewpoint in this regard is presented in chapter 6.

Chapter 7 titled 'Recommendations' summarises the suggestions included in chapters 2-6. Annexures include a brief note on grading system; design of question papers in the foundation courses, teaching proficiency scale and sample rating scales for the assessment of trainees' performance in various components of teacher preparation programme.

## CHAPTER 2

# EVALUATING STUDENT TEACHERS IN THE THEORY COMPONENT OF ETE CURRICULUM

### 2.1 The Context

As stated earlier, the curriculum of Elementary Teacher Education programme comprises three broad components, namely, educational theory, practice teaching and practical work such as project work and co-curricular activities. Project and sessional work also forms part of theory courses, which aims at strengthening the student teachers' understanding of educational theory. The student teachers are evaluated in all the three components as the skills and competencies related to each of them collectively contribute to the effectiveness of a teacher. The present chapter deals with the evaluation of student teachers in various theory courses, which are further broadly categorised as under:

- (i) Foundation courses
- (ii) Teaching methodology courses
- (iii) Practice oriented non-scholastic areas like physical education, work experience, visual and performing arts and computer education.

In this regard, it needs to be specially mentioned that evaluation techniques and tools as also the practices and procedures of evaluation will but have to be different in different facets particularly because different abilities and proficiencies will be the subject of evaluation in each facet. Also because the importance of each facet in the scheme of studies is different, the weightages they would need to be assigned will naturally be different. Furthermore, because of the varying nature of the content and procedures, some of them may be required to be predominantly assessed internally and others externally and therefore, different schemes of evaluation will need to be developed for different facets.

### 2.2 The Current Evaluation Scene

The controlling authorities of the ETE programme, namely, SCERTs and Education Boards usually incorporate an outline of the evaluation scheme in the curriculum and syllabus prescribed for the programme. The scheme provides details of the nature and scope of annual



examination, weightages to the three components in terms of marks, weightages for internal and external assessment, in each component, qualifying criteria, etc.

There is widespread dissatisfaction about the evaluation system that is currently in vogue. It is often pointed out that evaluation in theory courses is characterised by subjectivity and therefore it lacks reliability and validity. Since it tends to put greater premium on 'rote memorisation', it fails to trigger worthwhile improvements in the curriculum transaction strategies. Internal assessment has surely been introduced in many states, but it is often misused as extraneous factors like personal whims and biases play a significant role in the determination of assessment awards. Moreover, the system lacks transparency in the absence of suitably laid down criteria of objective assessment.

During the past few decades, many SCERTs and Boards have surely taken concrete steps to make the evaluation system more rigorous, objective, criterion based and transparent. For instance, weightage for projects/assignments related to theory courses, has been assigned separately, question papers have been made more comprehensive by including different forms of questions (that is, long answer type, short answer type and objective type). But, these measures have, by and large, remained sporadic and have not somehow got institutionalised by the system of elementary teacher education.

Taking cognisance of the above mentioned concerns, the Committee has formulated its viewpoint regarding the interventions required for making the evaluation system more credible, dependable and transparent. These are discussed below:

### **2.3 Continuous and Comprehensive Evaluation (CCE)**

In view of the inherent weaknesses and inadequacies of the traditional system of evaluation, which mainly relies on summative evaluation alone, the need for CCE can hardly be exaggerated. Many Boards of School Education have made attempts to introduce CCE at the school stage and a few SCERTs have tried to introduce the theme in the elementary teacher education programme as well by making provisions for 'internal assessment', in all the components of the programme. But, mere introduction of internal assessment does not make the evaluation system 'continuous'. To be continuous, evaluation has to be an integral part of the teaching-learning-process itself and therefore it has to be based on a series of observations, the record of which need to be maintained meticulously and systematically. To make the

system **comprehensive**, it is imperative to assess the 'affective' growth of the student teachers to ascertain the extent to which they have learnt to perform the various roles and functions of a teacher and the extent to which they have acquired the personality attributes essential for becoming an effective teacher.

## **2.4 Grades Vs Marks**

The relative advantages and limitations of grades and marks as indicators of students' achievements have been enumerated time and again. After prolonged deliberations, consensus has now emerged that the use of grades (5 point or 9 point) is more practical for the purpose of classification of pupils in comparison to the marks involving a 101 point scale, as it is very difficult to distinguish between the abilities of individuals securing 64 and 65 marks respectively. The use of grades in place of marks is highly desirable in all the three components of the teacher preparation programme. However, the switchover from marks to grades should be introduced in a phased manner. During the transition period, a judicious mix of the two approaches should be introduced with **relative grades** and marks shown side by side. In the first phase, the grades may be used in for internal assessment in all the three components of the ETE programme. A brief note on the methods of determining 'grades' is given at annexure XVI. Sample scales facilitating use of grades are also given as annexures to the report. The use of grades will also contain the temptation of teachers for boosting the marks of their students, as the external evaluation in terms of marks and internal evaluation in terms of grades will be shown independently.

## **2.5 Internal Vs External Assessment**

Almost all the states have introduced internal assessment in the theory component of ETE programme and have assigned it a **weightage** of 20-30% in the final assessment. Internal assessment marks are arithmetically added to the marks of external assessment to determine the final result of a student. Some states have made it compulsory for the students to qualify separately in internal and external assessment, which is no doubt, a step in the right direction. However, there is need to make internal assessment free from all kinds of biases and prejudices and chance elements so that it becomes accurate, dependable and just. It would be desirable to present internal and external assessments separately as internal evaluation is capable of testing many more things than external evaluation inspite of some overlap. To achieve this, it is imperative to base internal assessment on a series of observations (a record of which may be

maintained through the Anecdotal Record Forms). Those should be on the basis of students' performance in a variety of testing situations such as classroom discussions, unit tests, periodical tests, project reports, assignments, oral tests, etc. These records should be continuously supervised and monitored by a Coordination Committee headed by the Principal of the institution.

## **2.6 Reforming Examinations**

The setting of **balanced question papers** is an important step in the conduct of written examination. Their content and structure determine the way the curriculum is transacted in the classrooms. Improvement in the quality of question papers is the single most important measure, which has the potential of reforming not only the examination but the entire process of curriculum development and transaction. The right type of question paper contributes significantly towards making the evaluation system transparent, objective based and valid besides producing the desired influence on the teaching-learning process. A few suggestions for improving the quality of question papers are discussed below:

### **2.6.1 Preparing Question Papers on the basis of Designs and Blueprints**

To ensure effective coverage of the prescribed syllabus and to ensure testing of a large variety of competencies and psychomotor abilities, question papers ought to be based on pre-decided designs and blueprints. But, the study of question papers used for ETE examination reveals that they are not based on well formulated designs and blueprints. A natural outcome of the non-prescription of weightages to objectives, major areas of content and different forms of questions in the 'designs' and their translation into 'blueprints' is that the question papers lack balance so far as the testing of higher abilities like critical thinking, application of knowledge and creativity are concerned. Most of the questions in question papers, however, by and large, test the students' ability for rote memorisation. There are, of course, some exceptions in some of the states in some subjects. To illustrate and substantiate the point, samples of the suggestive design of Question Papers on Foundation and Methodology courses of the ETE programme are given at annexure III.

### **2.6.2 Provision of Options in Question Papers**

Question papers ought to cover the entire curriculum of the concerned course, but the provision of options defeats the purpose of comprehensive coverage as the examinees may choose different permutations and combinations of questions for answering. The scores they obtain are thus likely to become incomparable endangering both reliability of the question papers and also of the total examination. The marks allocated to different areas of content also, consequently lose meaning. Instead of mentioning “attempt any five questions, all carry equal marks”, provision for internal equivalent choices within the units or designated sections of the prescribed syllabus could be made. Finally, we should move towards making all questions compulsory for everybody.

### **2.6.3 Variety in Question Forms**

During the past few years, some of the states have made provisions for including short answer type questions in the question papers, but majority of states are still continuing with the practice of ‘long answer questions’, alone. This is probably because of the convenience in framing such questions. The ‘very short answer’ and the ‘objective type’ questions, however, have yet to find favour with the examining agencies. Apart from being objectively assessable, short answer and objective type questions ensure a more comprehensive coverage of the content of the syllabus because of the increase in the number of questions. Therefore, it appears imperative to include all the forms of questions in the question papers meant for both terminal as well as annual examinations. Apart from prescribing weightages for the different sections of the syllabus, the same needs to be done in respect of different forms of questions and above all for different objectives (competencies attempted to be tested) for the development of questions.

### **2.6.4 Specific Wording of Questions**

It has also been observed that in a large number of cases, **questions are vaguely worded**, which could evoke only generalised answers. In some cases, the examinees are also likely to interpret the scope of the answers in different ways. In fact, the teacher trainees themselves need to be exposed to precisely worded questions which indicate in unambiguous terms, the scope and length of the expected answer. This personal experience of the teacher

trainees in responding to such questions is likely to enable them to frame pinpointed questions for their students when they become teachers.

A word definitely deserves to be said about the wording of the questions and the abilities tested by them. This need has been identified on the basis of the study of the examination question papers on the different units of the Diploma Course in Elementary Teacher Education.

In this context, it appears desirable to first enunciate the salient characteristics of questions as that would better enable us to examine the questions actually set in the examinations. Some of the main criteria that the questions should satisfy are:

- A question should be specifically worded so as to clearly indicate the precise scope of the expected answer.
- A question should satisfy the rules for framing the form of questions in which the particular question is couched e.g. a short answer question should not but expect a short answer.
- The requirements of the expected answer should be aligned to the marks devoted to the question and the proportionate time that can be spent by the examinee in answering it.
- Questions should test a variety of objectives (abilities/competencies and proficiencies) including higher abilities like critical thinking, decision making, interpretation and evaluation and not focus mainly on testing memorisation.

Examples of some questions, appearing in the question papers are given below alongwith a suggested modified versions of the questions. This is meant for highlighting the fact that in education (which is fundamentally an applied subject) only recall and reproduction of information is not required but also the use of the same in life situations.

Another thing, attempted to be highlighted by the examples is that an examinee in answering the question, should be compellingly required to respond to the specific query rather than writing all that he/she knows about the topic.

The examinee should also be enabled to realise that marks are to be awarded to different facets of the expected answer and that they should focus on writing answers to all those parts rather than writing on one or fewer than required aspects and devoting

disproportionate time and energy on them. Towards this end, the quantum of marks allocated to different facets of questions would, for example, need to be indicated as (2+4+4) and not just (10).

It has also been observed that sometimes questions carrying less marks require more time to answer than those carrying more marks. With indicated time budget in relation to allocated marks to questions, this type of mismatch is also likely to be contained to a large extent.

The following are some examples of the wording of questions set and their modified versions:

<b>ORIGINAL QUESTION</b>	<b>MODIFIED VERSION</b>
Describe the main changes in the educational structure in India since Independence.	Mention the main recommendations of the Mudaliar Commission about the structure of school education in India and give its implications.  (1 +4)
What are the stages of Child Development? Describe the main characteristics of each stage.	Enumerate two physical, social and emotional needs each of 6+ to 8+ children. Describe any one approach for satisfying them in any one of the three sectors.  (3+2)
Describe the dimensions of the Annual School Plan.	List any two factors that govern the preparation of school time table and describe how they influence the exercise.  (4+6)
Explain the significance of diagnosis and remediation in teaching.	Explain one distinguishing feature of a diagnostic test and an achievement test and describe the steps of the process of diagnosis and remediation.  (2+8)

What should we actually teach to pre-school children?

Give one approach each for developing all the concepts of pre-number, pre-reading and pre-writing among pre-primary school children and describe the operational steps of anyone of them.

(6+4)

Explain the saying "A Sound Mind in a Sound Body" with particular reference to elementary education.

Enumerate and explain any two competencies which children develop through participation in games.

(2+8)

Describe the significance of School community relationships.

Give any two measures through which a School can be made a 'Community Centre' and describe any one of them.

(2+3)

As can be seen the modified version of questions would more precisely be able to identify, whether or not, a particular student knows the concerned theme and its implications being asked. He/she can neither dodge the examiner nor beat about the bush. The questions would also enable him to know as to how many marks will he/she be entitled to, on writing a particular point in the answer. The total weightage to each question, will also enable him/her to know as to how much time should he/she justifiably devote on answering each of the different questions. Furthermore, with questions so specific as that, he/she will study topics in depth rather than peripherally and while he studies he will naturally try to focus on the practical applications of the theoretical tenets he/she studies. This will, no doubt, help him/her to become an effective teacher.

### **2.6.5 Questions for Testing Reflection and Critical Thinking**

Our educational system including the examination system is rightly criticised for putting undue emphasis on rote memorisation requiring the recall and reproduction of facts and figures in the examinations without adequate comprehension. Inadequate comprehension or

non-comprehension of the subject matter makes education boring and burdensome. This situation can easily be attributed to the nature of questions presently in use because the teachers, by and large, consider it their sole purpose to prepare the students for facing the examinations. If the style and language of questions is such that it facilitates testing of the students' higher abilities, viz., ability to reflect on issues and concerns of present day education vis-à-vis the knowledge they have acquired through the study of various foundation courses. In other words, the questions should aim at testing students' abilities of understanding, application, analysis, synthesis and for original, critical and creative thinking. A few examples of such questions are given below:

- During the past few days many instances of corporal punishment in schools have been reported in the media. As the Principal of an elementary school, what steps you will initiate to avoid corporal punishment in your school?
- As the Principal of your institution, you have received a circular from the Government regarding deployment of teachers for door-to-door survey of unenrolled children. But some teachers in your school have refused to undertake the survey on the plea that it does not form part of their duties. How shall you handle this situation?
- Examine the objectives of education as given in NPE – 1986. In your opinion, how far are these derived from the goals of our constitution and how far these are capable of addressing the challenges of the present century?
- Why do we prepare only framework of school curriculum at the national level? Imagine the consequences if Government of India decides to prescribe a uniform curriculum for the whole country.

#### **2.6.6 Training Question Paper Setters in the Concept and Techniques of Evaluation**

Mistakes are often found in question papers due to paper setters' lack of familiarity with the concept and techniques of evaluation, with particular reference to the technology of preparing objective based questions and balanced question papers. The examining agencies should take concrete steps to develop a cadre of trained professionals in evaluation through **in-service teacher education programmes in evaluation**. The services of only those teacher educators should be commissioned for paper setting who have undergone such specialised courses in educational evaluation.



### **2.6.7. Conclusion**

It is imperative that the reforms be appreciated in “spirit” before being implemented in “letter”. Continuous and comprehensive evaluation should essentially cover the non-scholastic aspects and be woven into the teaching-learning process as an on-going integral part. To overcome the shortcomings of the current practice of using marks and arbitrarily predetermined cut scores (33% 45% 60%) for classifying performance levels should be replaced by a system of “relative and not absolute grading”. In view of the varied potential of internal and external assessment those aspects of growth be attempted to be tested through internal assessment which cannot be justifiably evaluated externally and evaluation of distinctly different areas may be presented separately. Written examinations and their most important tool- the question paper may be based on designs and blueprints for ensuring balance in them, questions testing higher abilities be incorporated in due proportion for de-emphasizing rote memorisation, the number of questions be increased for ensuring reliability and options may be contained for discouraging selective study and selective teaching and for making scores comparable.

## CHAPTER 3

# EVALUATING STUDENT TEACHERS' PROFICIENCY IN TEACHING

### 3.1 Introduction

The primary purpose of a teacher education programme is to facilitate the trainees' preparation for performing various roles of a teacher including the role of an instructor, a facilitator of learning and an evaluator. In order to teach different curricular areas at the elementary stage, the trainees have to be prepared methodically and rigorously so that they acquire the essential competencies required for effective teaching, such as the skills of introducing a new lesson, stimulating pupils' interest and sustaining their motivation, explaining and helping the pupils to learn new concepts, framing probing and thought provoking questions, organising classroom interaction, etc. In teacher education institutions, the trainees' preparation for the above-mentioned tasks takes place in two distinct phases:

- (i) Preparatory stage
- (ii) Practice in actual work situation

After the completion of each phase, the trainees' effectiveness as teachers is assessed internally and externally for the purpose of certification.

### 3.2 Preparatory Stage

During the preparatory phase, a TEI generally organises the following activities:

#### 3.2.1 Exploratory Visits to Schools

In the beginning of this phase, the student teachers are deputed to visit a couple of co-operating schools for 1-2 days, to experience the ethos of an educational institution. Starting from the morning assembly, they are required to remain in the school till the last bell goes.

To begin with, one of the school teachers is expected to brief them about the history, achievements and major activities of the school and facilities available in it. Thereafter, they are encouraged to go around the school and stop at the school library, science laboratory, ICT laboratory, audio-visual room, school canteen, etc. for informal discussion with the teachers and students present at these places.

### **3.2.2 Observation of Classroom Teaching**

After the initial exposure to the actual work situations, opportunities are provided to the student teachers to observe the classroom teaching of teacher educators (Demonstration Lessons) and that of a few experienced and successful teachers. Each teacher educator (faculty member of the institution) of a school subject should be required to teach 3-4 model lessons (micro lessons as well as full length lessons) in the presence of student teachers on different components of his/her subject. Sometimes, successful and effective teachers of co-operating schools could also be invited to the institution to deliver model lessons for the benefit of the trainees. TEIs should also maintain a library of CDs and DVDs of micro and full-length lessons in different subjects delivered by eminent teachers.

### **3.2.3 Practising Blackboard/Whiteboard Writing**

Teachers are expected to make full use of the blackboard during the course of their teaching for various purposes such as writing, drawing sketches and diagrams, solving sums, etc. The trainees must be given intensive training in writing on the blackboard, with a piece of chalk or on white board with a pen. Legible and beautiful writing on the board registers a pleasant impression in the minds of pupils, and helps in sustaining their interest in learning. They have to switch over from wrist-based writing to shoulder-based writing and acquire adequate proficiency in it.

### **3.2.4 Preparation for Lesson Plan Writing**

The student teachers are required to write lesson plan on a theme/unit before teaching it in the classroom for which they have to visualise the activities they themselves shall organise or initiate and the activities the students shall undertake at different stages in the development of the lesson. Besides, they are also expected to indicate how they shall stimulate and sustain students' interest in the lesson and what questions they shall ask to 'trigger' original thinking among students and also to test their level of comprehension. The student teachers need to be

provided intensive training in preparing lesson notes and opportunities for sharing the same with the faculty.

### **3.2.5 Practising Teaching**

TEIs are expected to provide opportunities to the trainees regularly to practise different teaching skills in simulated situations. For instance, the student teachers may be required to teach micro lessons using the skills like questioning, explaining, narration, stimulus variation, recapitulation and thereafter redesign their micro lessons in the light of feedback received from the teacher educators and fellow student teachers and re-teach the lesson as per the modified design.

### **3.2.6 Closely Supervised Teaching**

As a result of the observation of teacher educators' teaching in different subjects and practising different teaching skills in simulated situations under the guidance and supervision of teacher educators, the student teachers should now be mentally prepared to teach full length lessons in all the major subjects at the primary stage and in a couple of subjects of their choice at the upper primary stage. Such lessons delivered by a student teacher in the presence of a teacher educator and a group of fellow student teachers are in common parlance called 'discussion' lessons or 'criticism' lessons. The presentation of each of these lessons is followed by a thorough and a detailed discussion. The feedback provided to the student teachers enables them to redesign their teaching strategies and hone their teaching skills. In some states, grades or marks are awarded by the teacher educators for discussion lessons, for which some weightage is assigned in the final examination.

### **3.2.7 Training Workshops**

Some TEIs organise a series of workshops, each of 2-3 days' duration to equip the student teachers for undertaking action research projects, preparing case studies of individual children and institutions and for preparing teaching aids and other teaching learning material. The theoretical aspects of action research, case study, project work, teaching aids, teaching learning material should be taken up in various theory papers before the organisation of workshops.

In some states, the students' performance in various pre-internship activities is internally assessed and the marks obtained by them in micro-lessons, discussion lessons, etc. are also added to their score of final examination. This practice does not appear to be professionally sound. The student teachers' performance in different pre-internship activities may be evaluated on a 3 or 5 point scale but no weightage should be assigned to it in the final examination because the student teachers at this stage are just beginning to learn the art of teaching. There is hardly any justification for penalising the student teachers in the final assessment for the mistakes committed by them in the initial stage of their training. At this stage, the concept of continuous evaluation should be implemented treating it as an essential step in the teaching learning or training process and not as a component of the final assessment, which is primarily meant for certification. However, it should be obligatory for the TEI to organise all the above-mentioned activities and to ensure that all student teachers participate in them with the required regularity and level of seriousness. It should be enough if a student teacher has observed and delivered the stipulated number of micro and full-length lessons, of which record must be maintained.

### **3.3 Practice in Actual Work Situations**

As per NCTE norms, the elementary teacher trainee has to undergo field experience of working in schools for one month each in the first and second year of the course. The field experience programme is known as Practice Teaching or Internship or School Experience Programme (SEP). The objective of the programme is to provide opportunities to the trainees to participate in all the school activities of the school starting from the school assembly in the beginning of the school day and ending with the after school activities like games and sports. During their stay in the school, the trainees are required to undertake the following:

- Preparation of Lesson Plans
- Classroom Teaching
- Observation of Teaching
- Preparation of Teaching Learning Material including Teaching Aids
- Preparation of Question Papers and Question Bank
- Preparation of a Case Study
- Planning and execution of an Action Research Project
- Preparing Children for Participation in Co-curricular activities
- Project Work

The assessment strategies for the above mentioned tasks are discussed below:

### **3.3.1 Assessing Lesson Plans**

The trainees are required to prepare plans or notes in respect of a pre-specified number of lessons in different subjects. A good lesson plan is the pre-requisite for the delivery of an effective lesson. Lesson plan note book is an important component of the portfolio that each student in a TEI develops during the course of his/her professional preparation. The quality of lesson plans written in the notebook ought to be assigned appropriate weightage in the final assessment. The quality of lesson plan implies relevance and adequacy of the subject matter, appropriateness of the method of teaching, suitability of questions, usefulness of the teaching aids identified, commencement and conclusion of the lesson. Needless to say that the quality of work rather than the number of lesson plans should be the basis for awarding marks.

### **3.3.2 Assessing Teaching Proficiency**

Classroom teaching, no doubt, is the major function of a teacher. Therefore, during the SEP, a trainee shall devote major part of his/her time to classroom teaching. A trainee is required to teach a pre-specified number of lessons in all subjects at primary stage and in two or three subjects at the upper primary stage. Some of the lessons delivered by a trainee in each subject are observed by the faculty supervisors and their observations are recorded in the lesson notebook. A few other lessons should be observed by the mentor teacher or head of the school.

The lessons delivered by trainees in different subjects should be observed and assessed by different faculty members of the TEI and by the mentor or head teacher of the school. The assessment need to be made against a pre-specified criterion of Teaching Proficiency, which may be based on the following:

- The trainee's mastery of the content of the subject
- The trainee's ability to communicate effectively
- The trainee's ability to create and sustain student's interest in the lesson
- The trainee's ability to frame and ask probing and thought provoking questions

- The trainee's ability to handle children's answers sympathetically and imaginatively
- The trainee's ability to make effective use of the blackboard and other teaching aids
- The trainee's ability to explain concepts/important teaching points with the help of suitable examples and illustrations
- The trainee's ability to create situations to promote self-learning and original thinking
- The trainee's ability to make proper use of child's immediate environment as a resource for learning and bring out inter-relationship between school knowledge and local knowledge
- The trainee's ability to recapitulate and summarise the lesson.

The observers' ratings along with comments on the above mentioned dimensions should be passed on to the trainees for their record and appropriate remedial measures.

A Teaching Proficiency scale based on the above-mentioned criteria (annexure V) may be used to calculate TPI.

The Educational Testing Services (ETS) Princeton, New Jersey has in its book entitled 'Evaluating Teaching Effectiveness' edited by Dr. Obottle devoted a chapter to the concept of PREP INDEX (Index of Proficiency in Educational Practices). The approach presents a methodology for quantifying qualitative outcomes of education.

The Committee has attempted to develop a simplified adaptation of the concept exclusively for serving the immediate purpose of its mandate, related to the formulation of guidelines for streamlining the procedures and practices of the evaluation of teaching done by teacher trainees. In this connection a term 'Teaching Proficiency Index (TPI)' has been conceived and coined.

The 'Teaching Proficiency Scale' developed by the Committee or some similar scale developed by the TEI concerned may be used in the process.

The following grid could thus be prepared and printed on one corner of the lesson plan notebook. The teacher educator (faculty member), besides writing his comments may also put in dots (.) or tick mark (☐) on the grid, which presents five point rating scales for different aspects as per his judgement about the level of proficiency demonstrated by Student Teacher in the course of the concerned lesson.

Point	Subject matter competence	Effectiveness of Communication	Ability for creating and sustaining interest	Quality of question	Handling of Students' answers	Quality of Black-board work	Proficiency in concept clarification	Encouragement to self learning	Use of environment as a resource	Recapitulation
1										
2										
3										
4										
5										

With ten aspects to be evaluated on a five point scale, the scores obtained by the teacher trainees on the grid, would be out of 50. This total of scores, on all the ten aspects, could then be multiplied by 2 to get the Teaching Proficiency Index (TPI).

The TPIs of at least ten lessons in different subjects delivered by the trainee during the last fortnight could be added up and divided by the number of lessons evaluated for getting the overall index as part of final assessment.

### 3.3.3 Assessing Peers' Observation

There is no denying the fact that an individual learns in several ways. Observing others in work situations is, no doubt, one such important source of learning and teacher trainees are no exception to this basic postulate. Therefore, trainees should also be required to observe the lessons of their peers, which serves two purposes. On the one hand, it provides an opportunity to the trainees to follow the good examples of their peers and avoid the mistakes committed by them. On the other hand, the feedback provided to the trainee whose lesson is observed, helps him/her in bringing about improvement in the quality of teaching. The trainees should, therefore, be required to maintain a record of their observations which should specifically highlight the strengths' and weaknesses of their peers' teaching. The trainees' ability to make meaningful observations and give relevant suggestions for improvement should be against a pre-determined criterion. A sample format for the assessment of trainees' observations about the teaching quality of their peers is given at Annexure VI

### 3.3.4 Assessing Teaching Learning Material

During the SEP, a teacher trainee is expected to prepare charts, models, maps, cards, etc. to help the students effectively grasp the content of the lesson. The quality of teaching aids



also gets judged alongwith other dimensions of teaching effectiveness when the trainee uses them in the course of a lesson. However, the trainee does not get the opportunity to use all the teaching aids prepared by him/her during the lesson observed and evaluated for assessment. In addition, the trainees may be required to prepare a variety of other teaching-learning material like compilation of poems, folk songs, folk tales, biographies, pictures, quotations, preparation and use of worksheets, games, etc. The trainees could use these self-prepared TLM while teaching different lessons on different occasions. However, the teaching aids and TLM prepared by the trainees should form part of their professional portfolio and should be evaluated in totality by the faculty. In order to ensure objectivity in assessment, a suitable tool could be designed and used. A sample TLM evaluation scale is given at annexure VII.

### **3.3.5 Assessing Construction and Administration of Tests**

A teacher is called upon to frame and ask different types of questions on several occasions in different situations. In the course of teaching, the teacher asks questions to ascertain the level of students' understanding of different content points in the lesson and also to obtain feedback about one's own teaching in order to make the required adjustments in the lesson delivery. The teacher is also called upon to frame questions and set question papers for the unit, monthly, terminal and annual tests and examinations. During the SEP, a trainee may be required to set a test for a unit or prepare a weekly test, and evaluate the scripts of pupils. In addition, he/she may also be required to give an oral test to the pupils, specially in languages. The first test given by the trainee should be observed by the faculty supervisor and the mentor teacher for providing necessary feedback. The second test should be evaluated by the faculty supervisor as part of assessment. A suggestive format for the assessment of student teachers' ability to construct and administer tests is given at annexure VIII, and standard formats used at different steps of test construction are given at annexure II.

### **3.3.6 Assessing Case Study**

During the SEP, the trainees remain in touch with pupils for a sufficiently long time. They may also get a chance to interview their parents, siblings, friends, neighbours, teachers, etc. After observing a class of pupils for about one week, each trainee may be required to identify a child for in-depth case study. The identified child may be a habitual late comer, irregular in attendance, repeater in the class, socially isolated, indifferent towards studies, talented in specific fields or a high achiever. In order to make an intensive and comprehensive

study of the identified case, the trainees should be in a position to apply and use the approaches they studied in the theory course. The study should also provide an opportunity to the trainees to peep into the inner world of children and to confirm or refute or find gaps in the knowledge about child development as given in books. The case study prepared by a trainee should be evaluated by two faculty members independently and the average of the two assessments should be taken as the student's score. A suggestive format for the evaluation of case study / project report is given at annexure IX.

### **3.3.7 Assessing Action Research**

A unit on Action Research is generally included in the theory courses in the ETE Programme. Some ETEs organise workshops as part of pre-internship activities to provide intensive training to the trainees for the identification of problem, construction of tools for the collection of data, analysis of data, report writing, etc. During the SEP in the first year, the trainees may be required to identify the problem, and start construction of tools for the collection of data. They should continue to work on the problem during the second year of the course and should be able to complete the project during the SEP in the second year. The project report submitted by a trainee should be evaluated by two faculty members independently and the average of the two should be taken as the student's score. A suggestive format for the evaluation of project report is given at annexure IX.

### **3.3.8 Assessing Children's Preparation for Participation in Co-curricular Activities**

The trainees should be required not only to participate in the school assembly and other functions and celebrations but should also be entrusted with the responsibility of preparing children for participation in various activities, such as news reading, news writing on the board, poetical recitation, solo and group singing, dance and drama, fancy dress, story telling, dialogue delivery, etc. Each trainee should be required to prepare children for participation in at least two items and assist in the organisation of either school assembly or class assembly. The performance of the trainee should be evaluated by the faculty supervisor of the house or the tutorial group to which he/she belongs or by the overall incharge of CCA in the institute. A suggestive format for assessing the trainees' ability to prepare students for participation in co-curricular activities is given at annexure X.

### 3.3.9 Suggested Weights for Different Activities

The weights for different activities, for the purpose of assessment, could be as under:

(i)	Lesson Plan Assessment	5%
(ii)	Teaching Proficiency Assessment	60%
(iii)	Assessment of Peer teaching observation	5%
(iv)	Assessment of TLM	5%
(v)	Assessment of Construction and Administration of Tests	10%
(vi)	Assessment of Case Study (1 <sup>st</sup> year) Action Research Project (2 <sup>nd</sup> year)	10%
(vii)	Assessment of Children's Preparation for co-curricular Activities	5%

The weights have been suggested in percentages and not in absolute terms. The maximum marks for different components may be decided by the examining agency. The faculty supervisor, mentor teacher and the school headmaster should be involved in the evaluation of trainees' performance and progress in various activities.

In order to ensure objectivity, transparency and inter-school (SEP schools) comparability in the assessment, a coordination committee should be set up in the TEI under the Chairmanship of the Principal of the TEI. The Committee should have twofold purposes:

- (i) to provide guidelines to the faculty supervisors and
- (ii) to critically scrutinise the awards given by faculty members for different activities.
- (iii) to moderate the awards given by the faculty supervisors in various SEP schools.

In sum, the trainees' proficiency in classroom teaching, lesson plan preparation, peer teaching observation, preparation of teaching learning material, construction and administration of tests, preparation of case study report or action research project report and preparing children for participation in CCA should be assessed internally by the faculty members of the TEI with the help of the staff of the SEP school. To minimise subjectivity and to ensure transparency in assessment, a suitable coordinating mechanism may be set up under the chairmanship of the Head of the institution. In respect of each dimension, assessment should be done by a team of evaluators and not by a single individual.

## CHAPTER 4

# EVALUATING STUDENT TEACHERS' PERFORMANCE IN CO-CURRICULAR ACTIVITIES

### 4.1 Introduction

Besides teaching theory courses and providing teaching experience to the teacher trainees, a teacher education institution organises a number of other activities which are broadly categorised as co-curricular activities. The organisation of such activities serves two purposes: On the one hand, it enriches the quality of curricular transaction in the institution leading to better preparation of teachers and on the other, it prepares the teacher trainees to organise similar activities in schools.' Such activities contribute to reinforce the trainees' learnings in the theory and practice of teaching.

A teacher education institution generally organises the following three types of activities:

- (i) Literary, Artistic and Cultural activities
- (ii) Community Living and Community Work
- (iii) Games and Sports

### 4.2 Literary and Cultural Activities

A teacher education institution is expected to organise a variety of literary and cultural activities to realise the following objectives:

- To prepare the trainees to express themselves through the medium of various arts such as music, visual and performing arts, language arts, etc.
- To develop creative thinking abilities among teacher trainees
- To reinforce the learning of theory courses included in the curriculum
- To sharpen and refine the teaching and other professional skills of the trainees
- To prepare the trainees for the organisation of similar activities in school for the benefit of children
- To equip the trainees for preparing and guiding school children for participation in such activities

The following activities could be organised in a teacher education institution:

- Morning Assembly
- Elocution contests on contemporary educational, social or political concerns
- Debates on current educational or social concerns
- Poetical recitation
- Celebration of days like Teachers' Day, Children's day, Human Rights Day, Gandhi Jayanti, Independence Day, Republic Day, etc.
- Celebration of festivals like Holi, Diwali, Id, Christmas
- Performance of skits, one act plays, etc.
- Solo singing, group signing, antakshri, etc.
- Cartoon making, painting, etc.
- Quiz competition
- Story telling
- School magazine/wall magazine/house bulletin

The list of activities given above is only suggestive and as such teacher education institutions may consider organising many other literary and cultural activities. It should be made compulsory for a student teacher to participate in at least one or two solo and one or two group activities. It is often observed that in an institution, only a few students participate time and again in many activities while many students' never get an opportunity to participate even in a single activity. Only a few selected students are also sent out for participation in inter-institution competitions or youth festivals.

To participate in music and art activities, it would be necessary for the students to learn and practise the basics of these arts. Therefore, visual and performing arts including music should be an integral component of teacher education curriculum. The students' participation in dramatics or art and music activities improves their skills of oral communication and style of lesson delivery in the classroom.

There is hardly any justification for making students' performance in CCA as a subject of external assessment. This is an area which should be assessed internally by the faculty of the institution. However, it is not desirable to organise formal tests periodically to determine internal assessment awards of different students. The 'students' performance in different activities should be tracked continuously throughout the academic year for which a cumulative record card should be designed and maintained by the institution and evidences collected through Anecdotal Record Forms.

The students' performance in each activity should be assessed on a five point scale for which letter grades from A to E may be assigned. The grade E however may not be awarded to anybody as it may connote complete absence of a quality. The overall grade for the student's participation in various activities may be calculated by taking item-wise grades into consideration.

### **4.3 Community Living and Community Work**

Education of Values has been an integral part of educational discourse in India for quite some time. However, it has received greater attention during the past few years in view of the continuing weakening of the moral and social fabric of the Indian society. In the backdrop of increasing conflicts and tensions between communities and nations, the International Commission on Education for the 21<sup>st</sup> Century (Delors Commission) recognised 'Learning to Live Together' as one of the four pillars of learning. To concretise the idea of living together, and to inculcate values like cooperation, tolerance, service, sacrifice, etc., it is considered imperative to provide opportunities of community living and community work to students and prospective teachers.

#### **4.3.1 Community Living**

The student teachers shall experience community living when they are made to live together with other students and teachers for a few days. For instance, during scouts or NCC camps, the trainees, besides acquiring the knowledge and skills relating to scouting and NCC, also practice the values of cooperation, tolerance, service, etc. The teacher education institution may provide opportunity to the students to live together for 2-3 days by organising a residential camp during weekends or vacation. The daily schedule of the camp may include physical exercises including yoga, campus cleanliness and beautification, gardening, lectures and discussions, cultural programmes, preparation of meals, camp fire, evening games. While it should be compulsory for all the students to participate in activities like physical exercises, evening games, lectures and discussions, the responsibility for organising other activities should be assigned to different houses/sections or groups of students.

Educational tours, excursions or picnics also provide opportunities for community living and practicing the values essential for living together with harmony and understanding. An elementary teacher education institution must make these activities a compulsory component of its plan of curriculum transaction.

The students' performance, behaviour, relationships with peers and attitudes towards peers, teachers and different aspects of work involved in the activity should be observed and appraised by the faculty supervisor concerned against the pre-defined criteria. The appraisal criteria may be based on the following criteria:

- contribution in the organisation of different activities as team leader or team member
- ability to work in teams
- ability to cooperate with others
- ability to tolerate and harmonise different view points
- attitude towards work involved in different situations
- ability to adapt to living conditions in camps or community living
- ingenuity and resourcefulness in handling unforeseen situations.

A sample 'community living' rating scale is given at Annexure XI.

#### **4.3.2 Community Work**

An elementary TEI should have some responsibility towards the surrounding community which it should discharge by undertaking certain activities useful for it. The activities could include cleanliness drives, literacy campaigns, door to door surveys of unenrolled and drop out children, health education campaigns, social forestry, etc. The institution may devise many more activities in tune with local contextual needs and realities.

Like community living components, nature and quality of students' involvement in the 'community work' activities should also be observed and appraised by the faculty supervisor concerned against a pre-defined criteria. The criteria may be based on the following:

- Contribution to the identification and planning of activities
- Contribution to the organisation of the activity as team leader or team member
- Empathy for the surrounding community
- Attitude towards community work
- Attitude towards manual work and physical labour
- Ability to live and work with others

A sample 'community work' rating scale is given at Annexure XII.

#### **4.4 Games and Sports**

An elementary TEI should make provision for the organisation of different indoor and outdoor games like badminton, basketball, football, hockey, cricket, kabaddi, different athletic disciplines, etc. depending upon the facilities and expertise available in the institution. Every student should be required to participate in one or two disciplines. This shall equip them to organise games and other physical education activities for children in school. The students' performance and achievement should be assessed by the physical education instructor and other faculty members against a well defined criteria which may be based on the following:

- Frequency of participation
- Positions or rewards won
- Relations with other members of the team and members of the rival team
- Interest in games and sports

A sample assessment proforma for the students' participation in games and sports is given at Annexure XIII.

#### **4.5 Weightage for different categories of CCA**

The three categories of CCA discussed in the present chapter should be assigned equal weightage. The students' performance on a five point scale should be assessed separately in each component and a letter grade from A to E may be assigned. Numerical value from 1 to 5 may be assigned for each letter grade and then a composite over all grade may be calculated.



## CHAPTER 5

### SUGGESTED EVALUATION SCHEME FOR CERTIFICATION

#### 5.1 Introduction

In the preceding three chapters i.e., Chapter 2-4, evaluation strategies in respect of three components of Teacher Education programme, namely, Theory, Practice Teaching and Co-curricular Activities, have been discussed in detail. The present Chapter makes an attempt to suggest relative weightages for different components and sub-components and also for internal and external assessment in each component. Besides, Viva-voce, which is to be organised in respect of all the three components together, has also been discussed in the Chapter. In addition, it also suggests a probable mechanism for the co-ordination, moderation and supervision of the implementation of the evaluation scheme in the TEIs.

#### 5.2 Weightage for Theory and Practicum

As stated elsewhere in the report, teacher education curriculum has three broad components, namely, theory courses, teaching related practical work (school experience) and practical work other than teaching, such as participation in varied activities, which are broadly categorised as 'co-curricular activities'. Besides, each theory course has practical component which may be in the form of projects, assignments, case studies, etc. The Committee feels that the theory and practicum components should be assigned equal weightage in the final assessment.

#### 5.3 Weightage for Internal and External Assessment

Since the duration of the elementary teacher education programme is two years, the annual examination is conducted by the designated examining agency at the end of the first year as well as second year. The student teachers are also required to undertake a specified number of practical activities in each theory course such as projects, assignments, construction of assessment tools, preparation of seminar papers etc., which have to be assessed internally by the faculty of the TEI. Besides, the student teachers are also required to write unit/terminal tests at regular intervals during the entire duration of the course. In addition, the students'

proficiency in practicum component (school experience and co-curricular activities) is also assessed internally by the faculty of the TEI. The Committee is of the view that equal weightage should be assigned for internal and external assessment but the students should be required to qualify in both the assessments separately.

#### 5.4 Final Assessment for Certification

The final assessment for certification should have the following components:

	Suggested Weightage
(a) Assessment in Theory Courses	50%
(i) Foundation Courses	20%
(ii) Teaching Methodology Courses	15%
(iii) Practice Oriented Non-scholastic Areas	15%
(b) Practicum related to teaching	20%
(c) Practicum other than teaching	10%
(d) Viva-voce and Group Discussion	10% (5% + 5%)
(e) Portfolio Evaluation	10%

##### 5.4.1 Assessment in Theory Courses

The courses included in the broad category of 'Theory' have sub categories as under:

- A. Foundation Courses
- B. Teaching Methodology Courses
- C. Practice Oriented Non-scholastic Areas like physical education, work experience, visual and performing arts and computer education.

The weightage for the internal and external assessment in respect of the three sub-categories may be as under:

	Internal	External
A. Foundation Courses	20%	80%
B. Teaching Methodology Courses	20%	80%
C. Practice Oriented Non-scholastic Areas	80%	20%

External assessment in the Foundation and Teaching methodology courses shall be based on the performance of students in the annual examinations conducted by the examining agency. Internal assessment shall be based on the projects/assignments submitted by the

trainees and their performance in the unit and periodical tests. The projects/assignments and periodical tests should be assigned equal weightage, that is, 10% each. External assessment in the Practice Oriented Non-scholastic Areas shall be based on the students' performance in the annual examination and internal assessment on the practical examination conducted by the institution and on the projects/assignments undertaken by the trainees. Practical examination and project work should be assigned equal weightage, that is, 40% each.

#### 5.4.2 Practicum related to Teaching

(i)	External Assessment	Nil
(ii)	Internal Assessment	100%

The weightages for different activities to be undertaken under this component as already suggested in Chapter 3 are reproduced below:

•	Lesson Plan Assessment	5%
•	Teaching Proficiency Assessment	60%
•	Assessment of Peer Teaching Observation	5%
•	Assessment of TLM	5%
•	Assessment of Construction and Administration of Tests and other evaluation tools	10%
•	Assessment of Case Study/Action Research	10% (5% + 5%)
•	Assessment of Children's Preparation for Participation in CCAs	5%

The assessment strategies for the above mentioned activities have been discussed at length in Chapter 3.

#### 5.4.3 Practicum other than Teaching

(i)	External Assessment	Nil
(ii)	Internal Assessment	100%

The activities covered under this component are broadly of three types:

- Literary, Artistic and Cultural activities
- Community Living and Community Work
- Games and Sports

The assessment strategy in respect of the above mentioned activities as presented in Chapter 4 envisages assessment on a five point scale by assigning letter grade from A to E. If required, numerical value from 1 to 5 may be assigned for each letter grade to calculate the total score of a student.

#### **5.4.4 Viva Voce and Group Discussion**

- (i) External Assessment                      50%
- (ii) Internal Assessment                      50%

##### **(a) Viva Voce**

The Viva Voce should be conducted at the end of the 2<sup>nd</sup> year jointly by the internal and external examiners, appointed by the examining agency. Each team of evaluators should comprise one internal examiner from the TEI concerned and one external examiner from other TEIs or schools.

The joint team of examiners should hold the Viva Voce to ascertain the trainees' knowledge of different school subjects, teaching methods and techniques, ways of making specific lessons interesting and motivating pupils. The examiners could suggest specific situations to the trainees and ask them how they shall handle them while teaching different subjects. The situations may also relate to the problems of classroom management or students' level of motivation and contribution in the development of the lesson. A few suggestive questions are given below:

- (i) How shall you help the pupils to arrive at the definition of 'noun'?
- (ii) How shall you explain the meanings of the word 'northward' and 'southward'?
- (iii) How shall you motivate the pupils for a lesson on 'Freedom struggle'?
- (iv) You are teaching a lesson on 'Green Revolution' in Class VII. What shall you do if you find some of the pupils losing interest in the lesson?
- (v) In a lesson on 'Democracy', how will you highlight the need for an impartial and independent Election Commission?

The Viva Voce may cover theory courses also, as the trainees' written answers, in many cases, may not be the true indicator of their level of comprehension and appreciation of the core concepts thereof. The examiners should ask such questions as well help them to ascertain the examinees' ability to relate theoretical knowledge to the day to day problems of teachers and students and also to the concerns of present day educational system. A sample format for the assessment of students' performance in the Viva voce is given at annexure XIV.

**(b) Group Discussion**

TEIs should organise Group Discussion twice - first towards the end of the first year and then sometimes in the second half of the second year. The list of themes on current educational concerns and challenges and the major initiatives taken to address the concerns should be finalised by the faculty separately. For the first and second year students, Group Discussion (GD) could be organised in groups of 5-6 students in the presence of 2-3 faculty members. The topics to be discussed in different groups should be announced 2-3 days before the organisation of GDs. The student teachers' performance could be rated against the criteria of their understanding of the subject under discussion; their ability to communicate effectively; and their potential for reflection and critical thinking.

**5.4.5 Portfolio Evaluation**

Portfolio evaluation may be conducted alongwith the Viva Voce by the same team of examiners. Each trainee should be required to develop a portfolio relating to various components of Practice Teaching and SEP. The portfolio may comprise the following:

- (i) Lesson Plan notebook
- (ii) Peer observation record
- (iii) Teaching Learning Material and Teaching Aids
- (iv) Case Study Report
- (v) Action Research Report

The examiners should award marks with reference to the pre-specified maximum marks after assessing the quality of trainees' portfolio. The examining agency should however prescribe the criterion for the evaluation of each component of the portfolio. For example, the quality of the work rather than the number of lesson plans should be the basis for awarding marks. The quality of lesson plans implies relevance and adequacy of the subject matter, appropriateness of the method of teaching, suitability of questions, usefulness of the teaching

aids identified, commencement and conclusion of the lesson. Likewise, specificity rather than generality of comments should be the basis for the assessment of peer observation records. The teaching learning material and teaching aids should be assessed against the criteria of relevance, appropriateness, cost effectiveness, etc. A sample format for the assessment of students' portfolio is given at Annexure XV.

## **5.5 Moderation and Supervision**

It is often pointed out that internal assessment generally is characterised by lack of transparency and objectivity and in many places it is influenced by the personal biases and prejudices of the faculty members. There are inter-examiner variations within the institution as each faculty member has his/her own position regarding the standards expected from students. In the case of SEP, inter-school variations are there due to the involvement of different faculty members, heads of SEP schools and mentor teachers in the evaluation process. To address the above mentioned concerns, it is imperative to create an appropriate mechanism in each TEI to oversee the internal evaluation in different components of the programme and to formulate guidelines for the maintenance of records and for ensuring transparency, objectivity and comparability. It is suggested that a Co-ordination Committee should be constituted in each TEI under the chairmanship of the Principal. The major function of the Committee should be to help streamline the evaluation procedure, develop appropriate assessment tools and moderate the assessment awards in different activities, wherever necessary.

The examining agency should also appoint a Moderation Board to oversee the maintenance of internal assessment records in different institutions and to undertake necessary measures to ensure inter-institution comparability. The Moderation Board should visit each institution at least once in a year, preferably during the last three months of the year, when enough internal assessment records should be available for scrutiny.

In sum, the student teachers' evaluation in theory courses should be both internal and external with a weightage of 20% and 80% respectively. The assessment of students' performance in the practicum component should be totally internal. While Viva Voce and Portfolio Assessment should be conducted jointly by a team of an internal and external examiner, GD could be conducted internally by the faculty. In order to ensure transparency and objectivity, a Co-ordination Committee and a Moderation Board should be appointed at the level of each TEI and concerned examining agency respectively.

## CHAPTER 6

# PREPARING TEACHER TRAINEES FOR EVALUATING PUPIL GROWTH

### 6.1 The Context

The purpose of a teacher training course is to prepare the trainees to become effective teachers. Teachers are expected to perform several functions of which the 'teaching' and 'testing' are of utmost importance. The teacher training courses are, therefore, expected to provide extensive and intensive inputs for preparing teachers to effectively perform the above two functions.

The focus of the present chapter is to deliberate on the various elements of the elementary teacher training courses designed for whetting the abilities and proficiencies of the trainees in evaluating pupil-growth, when they become school teachers. In addition, an attempt has also been made to reflect on the strategies needed to equip the prospective teachers to negotiate the task of 'testing' more effectively.

### 6.2 The Current Scene

Recognising the need for preparing the teacher trainees for the 'testing' function, the examining agencies for the ETE programme have included one or two units on evaluation in each methodology course. Some of the states have also introduced some selected elements of evaluation among the 'Foundation Courses' alongwith 'units on evaluation' in methodology courses. Some experts are of the view that unnecessary duplication in the curriculum of methodology courses should be avoided as that may make the curriculum heavy for the students. Some others entertain reservations that repeating the same thing in all methodology courses may mean duplication. Moreover, in the context of school education mere understanding of theory of evaluation without its applications will be inadequate. On the other hand, the advocates of 'evaluation' as an independent course strongly feel that mere inclusion of evaluation in methodology courses is grossly inadequate as the trainees do require a deeper understanding of the theoretical formulations of the practices which they shall be called upon to concretise in constructing different forms of objective-based questions, setting of balanced question papers (with the help of designs and blueprints).

Moreover, the teacher educators handling different methodology courses may not have adequate grounding in the theory and technical aspects of evaluation, and therefore, they are likely to impart half-baked knowledge to the trainees. In addition, there is also a possibility that teacher educators of different methodology courses, possess proficiency in evaluation at different levels and sometimes they may work at cross-purposes while dealing with some aspect of evaluation in their respective subjects. The two points of view need to be reconciled on merit so as to equip the teacher trainees to become more effective evaluators of pupil growth. The best way for reaching a considered conclusion is to review the contents of the current elementary teacher education syllabi prescribed in different states.

### **6.3 Review of the Existing Syllabi**

While scanning the existing syllabi, one easily discovers that in many cases a number of elements enunciated in the National Policy on Education 1986/92 too have not found a place in them. The theme of Comprehensive and Continuous School-based Evaluation too has only been nebulously conceived, peripherally touched. 'Grading' on the other hand has not been mentioned anywhere.

The term 'educational evaluation' does, in some places, find a mention among the objectives of methodology courses, but it seldom gets reflected in the contents of the courses. Furthermore, this mention too is often in vague terms, as the following statements go to illustrate.

"To use the tools of evaluation for evaluating performance / achievement objectively".

"The student teacher will prepare items on different objectives, achievement tests, administer the tests, suggest remedial measures, analyse data and interpret it".

"Evaluation types: formative and summative, cumulative record cards"

"Construct and use suitable tools of evaluation to measure students learning and diagnose common errors."

"Preparation of relevant tools and self-evaluation material".

The above examples about the mention of the elements of educational evaluation in the elementary teacher education courses need not be further multiplied as the above by themselves, are proofs enough of the lip service done to evaluation. The items do not also



yield any direction about what precisely is expected to be done by the teacher trainees. Even if we try to derive some meaning just out of the above statements it can be said that the desire of the formulators of the courses is that the teacher trainees should be able to prepare objective-based test items and full balanced tests. This would necessarily imply.

- a background of objectives and their respective specifications.
- the knowledge of different evaluation tools.
- the rules for constructing different types of objective-based evaluation tools
- the methodology for preparing and using achievement tests and diagnostic tests.

In yet another instance, a mention made as part of the objectives of a methodology course is that on completion of the course:

“the student will be able to develop the skill in  
evaluating / assessing the difficulties of the students.”

Evidently, the reference is to the diagnosis of the strengths and weaknesses of the students, which would imply:

- a knowledge about the concept of diagnostic tests vis-à-vis achievement tests
- the ability to prepare diagnostic test (sometimes a battery)
- the administration and scoring of the diagnostic tests
- the analysis of pupil responses for deriving appropriate conclusions about the strengths and weaknesses of students.

The story would not end here as the process will need to be further taken ahead through the development of **remedial / enrichment material**, administering it, retesting the students for finding out the gains made. All these, again doubtlessly, need a theoretical grounding in the use of **evaluation, not just as a means of assessing the level of achievement but for further improving it**. The situation again warrants incorporation of **not only the theoretical concepts and constructs of evaluation in the courses but also for practical work related to them**.

Again in the prescribed syllabus of ETE programme as part of ‘school experience’ in one state one of the items of work mentioned is:

“Achievement tests in both the subjects - construction,  
administration and item analysis”

The statement sounds technical and when we ponder on the pre-requisites for accomplishing the above tasks, we find that it would involve the theoretical background and corresponding functional competencies in –

- preparing a design for preparing balanced tests / question papers.
- preparing a blueprint based on the design.
- preparing objective-based questions / test items of different forms according to the rules for framing them.
- preparing and using achievement and diagnostic tests
- preparing a marking scheme with value points
- preparing a question-wise analysis for checking the conformity of the test with the design and the blueprint.
- analysis of pupil responses for identifying hard spots in learning.
- analysis of the test scores for determining the difficulty value and discrimination indices of each test item (particularly in tests with all multiple choice test items) and identification of hard spots in learning.
- development and use of remedial/enrichment programmes and material

It may also be mentioned that many of the indicators in the course contents are parts of practical work related to educational evaluation, which cannot possibly be executed without a theoretical background. This further augments the realisation of the above need. **A complete Mini Test on Digestive System has also been given using different formats at Annexure IV by way of an example.**

Furthermore, professional courses do not stop at imparting only theoretical knowledge which remains incomplete without the acquisition of practical proficiencies for which these courses have but to provide hands-on-experience. **Even in all the teacher education courses hands-on-experience is provided during practice teaching** for preparing teacher trainees for teaching. At the same time, however, ‘testing’ or evaluating pupil competencies has but to be another core component of teacher preparation. **In regard to evaluation too, practical work is no less important and needs to be provided as the subject calls for a background in psychology as also test statistics besides evaluation itself.** Practical work may therefore be the third component of a final certificate besides theory and practice teaching. It, therefore, appears necessary that practical work corresponding to themes of theory also needs to be

necessarily inducted as part of the theory course in educational evaluation. This may be allocated a definite weightage.

#### **6.4 Need for A Compulsory Course on Evaluation**

The critique of the present day syllabi presented in the preceding section underscores the need for the inclusion of a **full compulsory course on educational evaluation among the Foundation Courses**. It is felt that the proposed course shall better equip the trainees to learn about stating and defining objectives, construction of different types of evaluation tools, appreciation of the differentiating features of achievement tests and diagnostic tests, concepts of balanced tests, designs, blueprint, marking scheme, question-wise analysis and analysis of test scores, etc. A detailed understanding of evaluation in the cognitive, affective and psychomotor domains of development for the coverage of total personality will prove to be a great asset for the teacher. However, the inclusion of a separate course of evaluation does not mean that units on evaluation shall have no place in the methodology courses. While in the Foundation Course, the emphasis should be on theory, principles and techniques of evaluation, the emphasis in the methodology courses should be on practical aspects of evaluation, such as, construction and administration of tests, preparation of balanced question papers alongwith designs and blueprint, construction of various forms of questions, preparation of marking schemes with value points etc. Thus, the methodology courses should only include practical work in the form of projects and assignments involving the use of various types of tools and techniques of evaluation for covering not just academic achievements but also the health status personal and social qualities, interests, attitudes and proficiency in co-curricular activities.

A suggestive outline of the content of the proposed compulsory Foundation Course on Evaluation is given below:

#### **6.5 Outline of the Suggested Foundation Course in Educational Evaluation and Related Practical Work**

##### **6.5.1. Course Objectives**

6.5.1.1 To gain familiarity with the examination system in India, its shortcomings and corresponding reform measures planned and/or implemented for overcoming them.

6.5.1.2 To acquire the knowledge of the characteristics of educational objectives and their classification into different domains of development.

6.5.1.3 To develop an understanding of different evaluation techniques and tools, their merits and demerits and the situations of their useability

6.5.1.4 To develop the ability for constructing and using different types of objective-based questions, balanced question papers, rating scales, check lists, inventories, observation schedules etc.

6.5.1.5 To acquire a critical understanding of the nature of the concepts of Formative and Summative Evaluation, methods of grading performance and Comprehensive and Continuous School-based Evaluation.

6.5.1.6 To acquire an understanding of elementary concepts of test statistics and an ability to use these concepts for the analysis of test results for various purposes

## **6.5.2. Course Content**

6.5.2.1 Examination system in India - its shortcomings and measures for overcoming them

6.5.2.2 Concepts of Examination and Educational Evaluation

6.5.2.3 Instructional objectives, their characteristics, their definition in terms of specification and their classification into Cognitive, Affective and Psycho-motor Domains.

6.5.2.4 Techniques of Evaluation (written, oral, practical, observation) their merits and limitations and situations for their appropriate use

6.5.2.5 Tools of Evaluation (questions, question papers, observation, schedules, rating scales) and their construction, their respective merits and shortcomings.

6.5.2.6 Test characteristics (Validity, Reliability, Objectivity, Practicability) their meaning, implications, characteristics and methods of ensuring them.

6.5.2.7 Continuous and Comprehensive School-based Evaluation, its elements (both scholastic and co-scholastic aspects) and procedures of evaluation and certification

6.5.2.8 Methods of grading pupil performance, Merits and demerits of different approaches, derivation, determination and declaration of grades in large scale external examinations and in school situations

6.5.2.9 Test Statistics – Basic Statistical concepts and their applications in analysing and interpreting test results (Frequency distribution, Measures of Central Tendencies, Measures of Variability, Normal Probability Curve)

### **6.5.3. Suggestive Examples of Practical Work**

6.5.3.1 Writing about shortcomings of the Indian Examination System and giving examples of corresponding reform measures and explaining any two of them in detail

6.5.3.2 Writing an example of an over all educational objective, deriving an objective of elementary education from it, deriving the objectives of a particular subject for a particular class from it, deriving the objectives of a particular teaching unit from it and finally deriving the objectives of a lesson from that unit

6.5.3.3 Developing a balanced full test/question paper of a final examination in a particular subject for a particular class in the elementary school. Also developing one unit-test each in any two selected subjects. The full question paper and the unit tests may be complete with a design, a blueprint, the test, a marking scheme and a question-wise analyses

6. 5.3.4 Selecting the topic of any one of the unit tests, developing a diagnostic test on it, administering the test, identifying hard spots in learning, developing remedial material, providing remedial instruction, retesting the students on the same topic, identifying the gains and writing a report of the exercise. (This may be done as a part of practice teaching or internship and the report be endorsed and signed by the guide/teacher concerned).

6.5.3.5 Working out the evaluative criteria for any one indoor and any one outdoor co-curricular activity in a school and developing a five point rating scale on each of the evaluative criteria in both the cases with defined points

6.5.3.6 Implementing Continuous and Comprehensive School-based Evaluation (CCE) during practice teaching or internship programme, preparing and awarding a CCE certificate for each student of the class in consultation with the class teacher. The certificate may cover the health status, personal and social qualities, interests, attitudes, proficiency in indoor and

outdoor co-curricular co-scholastic activities besides the level of attained academic achievement. Evaluation of health-status and of academic achievement may be done in numerical terms and the rest of the items may be evaluated in terms of five point symbolic grades (ABCD and E)

6.5.3.7 Taking the obtained scores of students in a particular subject, of a class, in an elementary school, at a particular examination and awarding relative grades to students on a five point scale

6.5.3.8 On the basis of the scores of students (in 6.5.3.7 above), draw a curve of achievement on a graph paper with a class interval of 5.

#### **6.5.4. Organisation of Practical Work**

The practical work may go on simultaneously with the coverage of themes in theory classes.

The themes/topics/items etc. of practical work will be selected with the approval of the faculty member who is the guide. The guide by maintaining a record will ensure that the work is done by the student himself/herself. New situations in different themes will be attempted to be allocated.

The faculty members will also be expected to correct the assignments and discuss the students' performance.

It will be desirable that the Foundation Course in Educational Evaluation be transacted during the first of the two years of the D.Ed. course. Related practical work may be pursued by the teacher trainees side by side.

## CHAPTER 7

### SUMMARY OF RECOMMENDATIONS

The highlights of the evaluation framework in respect of elementary teacher education programme, detailed in Chapters 1-6 are summarised below :

#### **A. Principles of Evaluation**

1. The system of evaluation in elementary teacher education, like in any other programme of general or professional education, should be based on certain non-negotiable principles, such as (i) minimisation of subjectivity and maximisation of objectivity to the extent possible; (ii) highest degree of transparency, both in internal and external assessment; (iii) criterion based assessment in all the three components of the teacher education curriculum, namely, educational theory, practice teaching and practicum; and (iv) reliability and validity.
2. The above mentioned principles are best concretised if the system of Continuous and Comprehensive Evaluation is implemented in letter and spirit. The CCE enhances not only reliability and validity of evaluation but also makes it more objective and hence dependable.
3. In order to further concretise the principles of evaluation enumerated above, the present system of marks involving 101 point rating scale should be replaced by the grading system. Relative grading on a nine point scale, may be adopted for elementary teacher education programme in external evaluation. A five point scale may be adopted for internal evaluation.

#### **B. Educational Theory**

4. The student teachers' understanding of educational theory is assessed mainly through written examinations, the effectiveness of which depends to a large extent, among other things, on the quality of question papers, which in turn depends on their 'designs' and 'blueprints' and the quality of questions. The examining agencies in respect of elementary teacher education, namely, the

SCERTs or State Boards of School Education must prescribe 'designs' and 'blueprints' for setting question papers of external examinations. The paper setters, moderators and those working in elementary teacher education institutions should be trained in the concept and techniques of evaluation with particular reference to the preparation of balanced question papers through 'designs' and 'blueprints', for making them proficient in preparing question papers for terminal examinations as well as for periodical tests.

5. The question papers must include different forms of questions viz. objective type, very short answer type, short answer type and essay type. A combination of the four forms of questions would ensure a more effective coverage of content of the prescribed syllabus. This will also help improve reliability of the question paper.
6. It is imperative to incorporate questions testing higher abilities like critical thinking and also the ability to reflect on the implications of theoretical knowledge for the current educational policies, concerns of education and day to day problems of schools and teachers.
7. Implementation of 'Continuous and Comprehensive Evaluation' entails assessment at the institutional level by the faculty of the concerned institution throughout the academic session. The purpose of internally conducted evaluation, no doubt, is to provide prompt feedback to the students, as well as to the teachers, in order to enable them to undertake remedial measures for improving the level of their competencies. But, at the same time, periodical assessment by the faculty, should be given due cognisance in the final examination in all the three components of Teacher Education Curriculum, which may be as under :

	Internal	External
a) Theory		
(i) Foundation Courses	20%	80%
(ii) Teaching Methodology Courses	20%	80%
(iii) Practice-oriented Non-scholastic	80%	20%
Areas		
b) Teaching Proficiency	100%	Nil
c) Practicum (CCA)	100%	Nil



8. In spite of reforms in the content, style and language of questions, memorisation and reproduction of content without understanding, may adversely impact the assessment of students' performance in the written examination. In order to further minimise the role of rote memorisation, it is imperative to supplement written examination with oral examination. In the case of 'Practice teaching' and 'Practicum', oral examination or viva voce assumes greater significance as the genuineness of the project reports and teaching learning material included in the student teachers' portfolios could be verified only through face to face interaction. In the theory component, the purpose of viva voce should be to ascertain the student teachers' ability to reflect on the applicability of the theoretical knowledge in the educational situations with which teachers are concerned in their professional lives.

### **C. Teaching Proficiency**

9. In teacher education institutions, the trainees' preparation as teachers takes place in two distinct phases: (i) Preparatory phase and (ii) Practice in actual work situation. During the preparatory phase, TEIs organise a number of activities, such as exploratory visits to schools, observation of classroom teaching, practising of blackboard writing, practising lesson plan writing, practising individual teaching skills and delivering 'discussion' or 'criticism lesson'. The faculty should informally assess the trainees' performance in the activities mentioned above and provide regular feedback to enable them to undertake necessary corrective measures. However, the assessment during the preparatory phase should not be given weightage in the final evaluation as the trainees during the phase are just beginners in the art of teaching and therefore should not be penalised for their unsatisfactory performance in the final evaluation, the outcome of which they carry with them throughout their professional life.
10. During Practice teaching or internship, the student teachers are required to undertake a variety of activities, such as classroom teaching, observation of teaching preparation of teaching aids and other teaching learning material, preparation of question papers and question bank, preparation of a case study, planning and execution of an Action Research project and preparing children for participation in co-curricular activities. The trainees' progress and performance should be assessed regularly by the faculty and should be appropriately recorded.

11. In order to minimise subjectivity in assessment, the student teachers' performance in each activity should be assessed by two faculty members independently, wherever possible, against the pre-determined criteria, for which they should make use of suitable assessment instruments. They may use the rating scales given in annexures of the report, with suitable modifications or adaptations, if necessary.

12. A suggested plan of weightages for different activities carried out under 'Teaching Proficiency' for the purpose of assessment may be as under:

(i)	Lesson Plan Assessment	5%
(ii)	Teaching Proficiency Assessment	60%
(iii)	Assessment of Peer Teaching Observation	5%
(iv)	Assessment of TLM	5%
(v)	Assessment of Construction and Administration of Tests	10%
(vi)	Assessment of Case study (1 <sup>st</sup> year) Action Research Project (2 <sup>nd</sup> year)	10% (5% + 5%)
(vii)	Assessment of Children's Preparation for participation in CCA	5%

13. In order to ensure objectivity, transparency and inter-school comparability in the internal assessment, a co-ordination committee should be set up in each TEI under the chairmanship of the Principal. It should perform the following functions:

- (i) Providing guidelines to the faculty supervisors
- (ii) Moderating the internal assessment awards given by the faculty supervisors in various SEP Schools

#### **D. Co-curricular Activities**

14. In a TEI, a teacher trainee is generally required to participate in three types of co-curricular activities, namely, (i) literary and cultural activities, (ii) community living and community work and (iii) games and sports.

15. The students' performance in each activity should be assessed on a five point scale for which letter grades from A to E may be assigned. The overall grade for

the students' participation in various activities may be calculated by taking item-wise grades into consideration.

16. To ensure objectivity and transparency, each assessment, should be done by two faculty members independently. The co-ordination committee mentioned earlier in the context of 'Practice Teaching', should supervise and regulate internal assessment in respect of CCA also. The faculty members should make use of rating scales and other instruments of assessment, wherever necessary. A few sample rating scales are given in annexures.
17. The three categories of CCA mentioned above should be assigned equal weightages. The students' performance in each component should first be assessed on a five point scale and subsequently a composite over all grade may be worked out.

#### **E. Final Assessment for Certification**

18. The final assessment for certification should have the following components:

Dimension	Suggested Weightage	Internal Assessment	External Assessment
1. Theory Courses			
(i) Foundation Courses	20%	20%	80%
(ii) Teaching Methodology Courses	15%	20%	80%
(iii) Practice Oriented Curricular Areas	15%	80%	20%
2. Teaching Proficiency	20%	100%	Nil
3. Practicum (CCA)	10%	100%	Nil
4. Viva Voce and Group Discussion	10%	50%	50%
5. Portfolio Evaluation	10%	50%	50%

19. Group Discussion (GD) should be conducted twice on the current educational concerns, challenges, etc. by the faculty in groups of 5-6 students each.

20. Viva Voce in respect of all components of Teacher Education Curriculum should be conducted at the end of 2<sup>nd</sup> year by a team of two examiners jointly – one external and one internal.
21. In order to ensure transparency, objectivity and inter and intra institutional comparability, a Coordination Committee at the level of TEI and a Moderation Board at the level of the examining agency should be appointed.

**F. Student Teachers' Preparation as Evaluators**

22. To prepare the student teachers for performing the role of evaluators of pupil growth in schools, a compulsory paper on 'educational evaluation' should be included among Foundation Courses. This shall equip the trainees to test pupils' achievements in different scholastic and co-scholastic areas including their development in affective and psychomotor domains of personality.
23. In the development of evaluation tools particularly question papers, the teacher trainees may be given adequate drill in rigorously following the technical steps of their construction viz. designs, blueprints, marking schemes and question-wise analysis.
24. The course should have built-in exercises in the administration of tests and use of test results. For example, in the preparation of diagnostic tests, the analysis of test results for identifying hard spots in learning and the development and use of remedial material and confirmatory testing ought to be essential components'.
25. The teacher trainees ought to be trained in implementing the scheme of Continuous and Comprehensive, School-Based Evaluation, covering both scholastic and co-scholastic aspects of pupil growth. They should thus be enabled to acquire the competencies related to collection of evidences, tabulation of results, analysis of data and preparation of profiles of students.
26. The teacher trainees be made thoroughly conversant with the theoretical foundation of grading, different methods of grading, and with the award of grades in large scale external examinations and in school situations.

## **G. General**

27. The examining agencies should organise in-service training programme in educational evaluation for the benefit of teachers of ETEls. The programme should among other things aim at preparing the teacher educators for construction and administration of tests including preparation of different forms of questions and paper setting. The examining agencies should utilise the services of the trained personnel as paper setters for the annual external examination.
  
28. NCTE should undertake a couple of projects in order to provide professional support to ETEls, specially by making provisions for professional development of the faculty of these institutions. Some of the projects could be: (1) Training of Teacher Educators in Educational Evaluation, (2) Development of question banks in Foundation and Methodology Courses and (3) Preparation of Handbook on Evaluation for Teacher Educators.

No. 49-9/2005/NCTE (N&S)  
National Council for Teacher Education  
I. G. Stadium, I. P. Estate  
New Delhi

April 26<sup>th</sup>, 2005

**OFFICE ORDER**

**Subject : Committee for Streamlining Procedures and Practices of Evaluation in Elementary Teacher Education Programmes**

**1. THE BACKDROP**

Realising that evaluation is a weak – link in teacher education programmes at different levels, the NCTE had constituted a high level committee of experts for going into the matter in depth and details for coming out with concrete proposals for streamlining the procedures and practices in this field, with a view to turning out a more competent and effective work-force of teachers. Since a committee has completed its Report for Evaluation Methods and Procedures for Secondary Level Teacher Education, the following committee will take up study of Procedures and Practices of Evaluation in Elementary Level Teacher Education Programmes.

**2. COMPOSITION OF THE COMMITTEE**

**The committee will consist of:**

- |     |   |             |
|-----|---|-------------|
| 2.1 | Professor B. P. Khandelwal,<br>Former Director NIEPA and former Chairman CBSE,<br>New Delhi   | ...Chairman |
| 2.2 | Professor H. S. Srivastava<br>Former Head of Department of Measurement Evaluation,<br>Survey and Data Processing,<br>NCERT, New Delhi | ...Member   |
| 2.3 | Professor S. C. Sharma<br>Member, SRC, NCTE,<br>C-19, First Avenue,<br>3 <sup>rd</sup> Main Road, Sainik Puri,<br>Secunderabad        | ...Member   |

- 2.4 Professor G. L. Arora ...Member  
Former Head,  
Dept. of Teacher Education and Extension,  
NCERT, New Delhi
- 2.5 Dr. Meena Gautam ...Convenor  
Deputy Secretary, NCTE

**3. TERMS OF REFERENCE OF THE COMMITTEE:**

- 3.1 To study the existing content, procedures and practices of evaluation in elementary teacher education courses at different levels.
- 3.2 To evolve a framework of educational evaluation for different programmes of elementary teacher education.

**4. METHODOLOGY OF WORKING**

- 4.1 The Committee will study the current elementary teacher education courses at different levels in terms of their content and process with particular reference to educational evaluation.
- 4.2 The Committee will hold discussion with concerned administrators and academicians at local, regional and national level for soliciting their views about overcoming short-falls in the area of educational evaluation.
- 4.3 The Committee will convene meetings with theme related individuals for interaction on rejuvenating evaluation procedures and practices.

**5. PHYSICAL FACILITIES AND SECRETARIAL SUPPORT**

The Committee will evolve its own procedure and modalities for accomplishing the task. It is free to co-opt any other member(s), if required, like specialists in elementary teacher education curriculum, education technology, etc. The convenor of the Committee will seek prior approval of the Chairman of the Committee directly for the purpose.

6. NCTE will provide secretariat assistance and other necessary administrative support to the Committee.

**7. TIME TARGET:**

The Committee will be expected to submit the first part of the report regarding evaluation by the end of October 2005.

**8. ADMINISTRATIVE STATUS OF THE COMMITTEE**

The Committee will function under the overall direction of Chairperson, NCTE.

**9. FINANCIAL FACETS**

1. TA/DA to the members of the Committee for visiting NCTE and other places, if required, and sitting fee will be borne by the National Council for Teacher Education as per its rules.
2. TA/DA of the members for outstation visits will be governed by the NCTE norms at par with senior level officers.
3. Expenditure on postage, stationery and telephone calls will be met by NCTE.
4. Actual expenses incurred on transport of the members will be reimbursed by NCTE.
5. Expenditure on meetings convened by the Committee will be met by the NCTE as per its norms.

**(Dr. Meena Gautam)**  
**Deputy Secretary**

**Copy to:-**

1. All members of the Committee
2. PA/PS to CP/VCP/MS
3. DS-I/DS(AC-III)
4. All Under Secretaries
5. Accounts Officers/PO(Y)/SO(Admn.)



**No. 49-9/2005/NCTE (N&S)**  
**National Council for Teacher Education**  
**Hans Bhawan, Wing-II, Bahadur Shah Zafar Marg, New Delhi-110002**

**May 22, 2006**

**OFFICE ORDER**

The Committee constituted for streamlining procedure and practices of evaluation in Elementary Teacher Education programme under the Chairmanship of Prof. B. P. Khandelwal vide the office order dated April 26, 2005 is hereby discontinued.

This issues with the approval of the competent authority.

**(V. C. Tewari)**

**Member Secretary**

**Prof. B. P. Khandelwal**

**4503, ATS, Green-II, Sector-50, Noida, U.P.**

Copy to:-

1. Prof. H. S. Srivastava, The Humanity House 143, Dayanand Vihar, Delhi – 92.
2. Pfof. G. L. Arora, 423/7, Urban Estate, Gurgaon, Haryana-122001.
3. Prof. S C. Sharma, 20-8-11, New Ayodhya Nagar, Vijayawada-520003, Andhra Pradesh.

**ORDER**

**Subject : Committee for Streamlining Procedures and Practices of Evaluation in Elementary Teacher Education Programmes**

It has been decided that the Committee constituted on the above subject under the Chairmanship of Prof. B. P. Khandelwal, former Director, NIEPA and former Chairman CBSE vide officer order of even No. Dated 26 April, 2005 be revived and Chairman of the Committee may be requested to carry on its work towards finalizing the report.

2. Accordingly, the Committee for Streamlining Procedures and Practices of Evaluation in Elementary Teacher Education Programme constituted vide Office Order of even number dated 26<sup>th</sup> April, 2005 and discontinued vide Office Order of even number dated May 22, 2006 is hereby revived with the following composition:-

- |       |   |          |
|-------|---|----------|
| (i)   | Professor B. P. Khandelwal,<br>4503, ATS Green – II,<br>Sector -- 50, Noida, UP.              | Chairman |
| (ii)  | Professor H. S. Srivastava<br>The Humanity House,<br>143, Dayanand Vihar,<br>New Delhi-110092 | Member   |
| (iii) | Professor G. L. Arora<br>423/7, Urban Estate,<br>Gurgaon-122001                               | Member   |
| (iv)  | Shri Mrityunjay Jha<br>Under Secretary, NCTE  | Convenor |

3. The Committee will finalize the submit the report to Chairperson, NCTE within a period of three months. Chairman of the Committee may co-opt any other expert if he feels so.
4. Members of the Committee will be paid TA/DA and sitting fee as per NCTE norms/rules.

**(V. C. Tewari)**  
**Member Secretary**  
**Tel.: 23370182**

To:

All the members of the Committee

Copy to:-

1. PA to CP
2. PS to VCP
3. PA to MS
4. DS (Acad.)
5. DS (Sh. Mohan Das)
6. All Under Secretaries
7. SO (General Admn.)
8. SO (Cash)

## STANDARD FORMATS FOR PREPARING TESTS / QUESTION PAPERS

## A. FORMAT OF A DESIGN

Subject : \_\_\_\_\_  
 Unit / Paper : \_\_\_\_\_  
 Class : \_\_\_\_\_  
 Time : \_\_\_\_\_  
 Marks : \_\_\_\_\_

**Weightage to objectives:**

Objective	K/KE	U/CO	A/EX	S/AP	Total
Percentage of marks	_____	_____	_____	_____	_____
Marks	_____	_____	_____	_____	_____

**Weightage to Forms of Questions:**

Forms of Questions	E/LA	SA	VSA	O	Total
Percentage of marks	_____	_____	_____	_____	_____
No. of Questions	_____	_____	_____	_____	_____
Marks Allotted	_____	_____	_____	_____	_____
Estimated Time	_____	_____	_____	_____	_____

**Weightage to Major Content Areas:**

	Units/Sub-Units	Marks
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

**Scheme of Sections:** \_\_\_\_\_

**Pattern of options:** \_\_\_\_\_

**Estimated difficulty level:** Difficult : \_\_\_\_\_ % marks.  
 Average : \_\_\_\_\_ % marks.  
 Easy : \_\_\_\_\_ % marks.

---

Abbreviations : K (Knowledge), U (Understanding, A(Application), S (Skill)  
 KE (Knowledge of Elements of Language), CO (Comprehensive),  
 EX (Expression), APR (Appreciation),

E/LA (Essay or Long Answer Type), SA (Short answer Type), VSA (Very Short Answer Type),  
 O (Objective Type-Multiple Choice)



### C. ITEM SHEET FORMAT

#### Front side of the Item Sheet

S.No. \_\_\_\_\_

Objective	_____	Topic	_____
Specification	_____	Sub-Topic	_____
Form	_____	Expected	_____
Estimated	_____	Answering Time	_____
Difficulty Level	_____	Marks	_____

Question : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

#### Reverse Side of the Item Sheet

S.No. \_\_\_\_\_

#### SCORING KEY

QUESTION NO.	1	2	3	4					n
KEY									

#### MARKING SCHEME

EXPECTED OUTLINE ANSWER	MARKS TO EACH ASPECT	REMARKS

NOTE : The reverse (back) side of the item in an expanded form will become the marking scheme.



**SAMPLE DESIGNS OF QUESTION PAPERS IN THE FOUNDATION COURSES AT  
THE D.ED. LEVEL**

Evaluation of competencies of the D.Ed. trainees, within training institutions, assume both external and internal dimensions. The internally done evaluation, however, more often than not, is a replica of the pattern of external evaluation and particularly so, in respect of the Foundation and Methodology Courses, which constitute the theoretical component of the courses. Internal evaluation however is capable of covering many such areas which are not possible to be covered by external evaluation. This potential should therefore be fully exploited.

The final practice-teaching lessons, however, are evaluated jointly - internally and externally, practical work in some cases though evaluated internally, often carries a weightage in external evaluation.

The suggestions that follow are basically focused on the evaluation of the theoretical components of the courses mainly with reference to external examinations, which does basically influence internal evaluation in a variety of ways.

The study of the prescribed D.Ed, syllabi of Foundation Courses in different states reveals that the content of these courses, by and large, rotates round some eight titles which are as under:

1. Education in the Emerging society.
2. The Learner and Learning
3. School Management
4. Educational Evaluation
5. Pre-primary Education
6. Working with the Community
7. Health and Physical Education
8. Work Education



The themes included under these titles, however, vary quite widely, which most likely happens because of the interpretation of the various themes. In some cases even the same topic finds a place in different courses with an entirely a different title.

Though basically Foundation Courses and their weightages too differ quite widely, for purposes of the present discussion, it appears adequate to mention that while in courses of Secondary Teacher Education a 60:40 proportion to theory and practical work, is considered appropriate, in Elementary Teacher Education a proportion of 50:50 to theory and practical work respectively appears appropriate.

It also deserves to be mentioned in this context, that more often than not, in both the Foundation and Methodology Courses, the weightage to the included themes does not stand spelt out, leaving it to the discretion of the question paper setters to decide it. This can be a source of injecting subjectivity in regard to the parameters of the question papers and adversely influence both reliability and validity of evaluation.

It is surprising to note that the syllabus of no state has given any parameters of the "design" for setting question papers of Foundation and methodology courses. Therefore, it is proposed to present a suggested design of the question paper in Educational Evaluation by way of a sample. A sample design for a methodology course is also being given. Design for setting question papers of Foundation Courses and methodology courses could be developed on similar lines.

The broad uniform parameters of these designs are suggested as under:

Each question paper on a course may carry 100 marks and may have:

- Five long answer type questions carrying ten marks each, five short answer type questions carrying 6 marks each and another five very short answer questions carrying two marks each.
- A weightage of 20 marks may be been devoted to knowledge, 50 marks to understanding and 30 marks to application of knowledge (in unfamiliar situations).
- The estimated difficulty level of the questions, could be distributed as under: easy questions 25%, questions of average difficulty 50% and difficult questions 25%.
- An attempt may also simultaneously be made, to allocate weightages to the major content areas (themes) in question papers of different courses. The themes could be identified from the prescribed syllabi of different courses of different states and systematically organised for presentation.

e duration of the time to be allocated to each question paper could be 3 hours or 150  
with the allocation of a time-budget of 1.00 minute for each mark, in different questions,  
) minutes for revision.

**AL NOTE** It appears not just desirable but imperative to put into practice the  
logy of setting question papers (including designs, blueprints, marking schemes and  
n-wise analysis) in teacher education examinations where it is taught as an important

At the same time, it also deserves to be emphatically mentioned that as curriculum is one  
most important themes covered by all teacher education courses, curriculum rather than  
of Teacher Education Courses be, therefore, developed by the examining agencies.

hile the suggested design of the Foundation Course in Educational Evaluation has been  
standard formats of a blueprint, a marking scheme and question wise analysis are also  
n as part of annexures. Designs of question papers of other Foundation and Methodology  
ould be developed on similar lines.

needs, to be specially mentioned that the given sample designs are only suggestive and not  
re. The examining agencies and the framers of courses, should feel free to make any  
ons they deem desirable in their respective contexts.

### 3.1 SAMPLE DESIGN OF QUESTION PAPER

Course	Diploma in Education (D.Ed.)
Unit	<b>Educational Evaluation</b>
Time	3 Hrs
Marks	100

#### 3.1.1 **Weightage to objectives:**

Objective	K/KE	<i>UICO</i>	<i>AIEX</i>	<i>SIAP</i>	Total
Percentage of marks	20	50	30		100
Marks	20	50	30		100

#### 3.1.2 **Weightage to Forms of Questions:**

Forms of Questions	E	SA	VSA		Total
No. of Questions	5	5	5		100
Marks Allotted	50	30	20		
Estimated Time (in Minutes)	75 M	45M	30M	Revision. 30M	180 M

#### 3.1.3 **Weightage to Content Areas**

	<b>Units /Sub-Units</b>	<b>Marks</b>
1	Concept of Evaluation	10
2	Techniques and Tools of Evaluation (including grading)	20
3	Preparation of Balanced Question Papers and Unit Tests	25
4	Preparation of Diagnostic Tests and Remedial Measures	20
5	Continuous and Comprehensive Evaluation and Grading of Performance	25
	<b>Total:</b>	<b>100</b>

3.1.4 **Scheme of Sections** Nil

3.1.5 **Pattern of options** No options

3.1.6 **Estimated difficulty level:**

Difficult	25% marks.
Average	50% marks
Easy	25% marks

Abbreviations: K (Knowledge), U (Understanding), A (Application), S (Skills)

KE (Knowledge of Elements of Language), CO (Comprehensive)  
EX (Expression), APP (Appreciation)

E (Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O (Objective Type)

### 3.2 SAMPLE DESIGN FOR A TEACHING METHODOLOGY QUESTION PAPER

Course	Diploma in Elementary Teacher Education (D.Ed.)
Unit	Teaching Methodology Courses in _____
Time	3 Hrs
Marks	100

#### 3.2.1 Weightage to objectives:

Objective-wise Percentage of Marks	<i>K/KE</i>	<i>U/CO</i>	<i>A/EX</i>	Total
	20	50	30	100

#### 3.2.2 Weightage to Forms of Questions:

Forms of Questions	<i>E</i>	<i>SA</i>	<i>VSA</i>	Total
No. of Questions	5	5	10 20	20
Marks Allotted	50	30	30 Min	100
Estimated Time (in Minutes)	75 Min	45 Min	Revision 30Min	180 Min

#### 3.2.3 Weightage to Content Areas

	Units / Sub-Units	Marks
1	Objectives of Teaching and Learning the subject statement & definition	10
2	Course content of the subject of the Elementary Stage	20
3	Content material - textbooks and other support material and aids	20
4	Methods of teaching and planning for teaching	25
5	Evaluation of subject related acquired competencies	25
<b>Total:</b>		<b>100</b>

3.2.4 Scheme of Sections Nil

3.2.5 Pattern of options No options

3.2.6 Estimated difficulty level:

Difficult	25% marks.
Average Easy	50% marks
	25% marks

Abbreviations: **K** (Knowledge), **U** (Understanding), **A** (Application), **S** (Skills)

**KE** (Knowledge of Elements of Language), **CO** (Comprehensive) **EX** (Expression), **APP** (Appreciation)

**E** (Essay Type), **SA** (Short Answer Type), **VSA** (Very Short Answer Type), **O** (Objective Type)

## CONCLUSION

The purpose of presenting suggested sample designs of question papers of the course is to ensure:

- that the total prescribed content is effectively covered by the question papers.
- that the focus gets shifted to the testing of other higher abilities instead of mainly rote memorisation.
- that different forms of questions, carrying different marks are used. This will enable the use of the most suitable of the form of question, for testing the desired content and ability. It will also ensure effective coverage of the curriculum due to increase in the number of questions.
- that the test results are rendered comparable by systematically overcoming selective study and selective teaching, through the abolition of options in question papers which will also lead to improved reliability.
- that questions of different estimated levels of difficulty, are included and that all questions neither turn out to be only difficult or only easy.
- that the questions would require answers, which can justifiably be attempted within the available time as estimated for them.
- that with the requirement of the marking scheme to be prepared by the paper setter, the wording of the questions, will become more precise and pin-pointed and the evaluation will become more objective.

**ANNEXURE IV**

**A SAMPLE MINI-TEST**

As sometimes arbitrarily decided formats for the achievement tests are used, it has been considered desirable to present a mini-test with different components in standard formats.

**UNIT : DIGESTIVE SYSTEM**  
**CLASS : VII**

**TIME : 40 Minutes**  
**MAX. MARKS : 25**

**BLUEPRINT**

Objective FORM OF ITEM Content Sub-Unit	Knowledge			Understanding			Application			Skill			Total
	E	S	O	E	S	O	E	S	O	E	S	O	
Mouth and its parts	-	2(1)	-	-	2(1)	-	-	-	-	-	2(1)	-	6
Gullet and Stomach	-	2(1)	-	-	2(1)	-	-	-	-	-	-	-	4
Small and large intestines	-	2(1)	-	-	2(1)	-	-	2(1)	-	-	-	-	6
Liver, Spleen, Pancreas	-	-	1(2)	-	2(1)	-	-	2(1)	-	-	-	-	5
Metabolism	-	2(1)	-	-	2(1)	-	-	-	-	-	-	-	4
Total		9			10			4			2		25

Note:- Figures within brackets indicate the number of questions and figures outside the brackets indicate marks.

Summary :-

Short Answer (S) No.....12..... Marks.....24.....

Objectives type (O) No.....2..... Marks.....1

**TOPIC : DIGESTIVE SYSTEM****TIME : 40 Minutes****MAX. Marks : 25**

- Instructions:-
1. All questions are compulsory.
  2. Read the directions given in each question carefully before answering it.
  3. Be brief and to the point.
  4. Marks of each question are given on the right hand side.

- |   | (Marks) |
|---|---------|
| 1. Amylopsin is produced in the :<br>A. Gall Bladder D. Pancreas<br>B. Liver E. Large Intestine<br>C. Stomach   | 1/2     |
| 2. Which is the largest gland in our body.  | 1/2     |
| 3. Give exact locations of two salivary glands.   | 2       |
| 4. Draw the neat diagram of the digestive system and show<br>(1) Gall Bladder (2) Pancreas  | 2       |
| 5. By which parts of the digestive system are bread and butter digested<br>Which digestive enzymes help in digesting them?                                      | 2       |
| 6. Write two functions of the large intestines.   | 2       |
| 7. Just after taking a meal if it is vomitted, it is sour. Why?   | 2       |
| 8. Why is it not advisable to give rice as food to the children of less<br>than six months of age?  | 2       |
| 9. Give four external characteristics of liver taking into account the<br>following points.<br>(i) Situation (iii) Weight<br>(ii) Colour (iv) Length and breath | 2       |
| 10. What waste products are formed by the metabolism of<br>proteins? How are they got rid of?   | 2       |
| 11. The growth of small children is quicker than that of adults. Give<br>one reason.  | 2       |
| 12. If the liver is removed a patient dies but if the gall bladder is removed<br>a patient does not die. Why?   | 2       |
| 13. In a suspected case of food poisoning, which of the organs of the<br>body is mainly examined? And Why?  | 2       |
| 14. In the case of diseased liver of a patient, what type of food should<br>he avoid? Why?  | 2       |

## MARKING SCHEME

Q. No.	EXPECTED OUTLINE ANSWERS (VALUE POINTS)	MARKS
1.	D	1/2
2.	Liver	1/2
3.	(i) Parotid (ii) Submaxillary (iii) Sublingual	2
4.	Diagram	1
	Showing the parts correctly	1
5.	Small intestines (Duodenum)	1
	{ Amylopsin Lypase with the help of bile	1
6.	(i) Absorption of water (ii) To throw out excreta (Foeces) (iii) To absorb sugar and salts which are not absorbed in small intestines	2
7.	Gastric juice contains hydrochloric acid. Acid is sour to taste. Gastric juice mixes with food and comes in the mouth with food.	2
8.	Rice contains starch. Saliva of the small children does not contain enzymes to convert starch into sugar.	2
9.	(a) . In the abdominal cavity on the right side below the diaphragm. (b) Reddish Brown (c) 3 to 4 lbs. (d) 8" and 6"	2
10.	Urea and Uric acid Skin and Kidney	2
11.	Anabolic process is more in children than in adults.	2
12.	Liver produces bile from dead R.B.Cs., while gall bladder stores bile.	2
13.	Liver, any poison in the stomach is absorbed by the liver and it is attempted to be prevented from spreading to the whole body.	2
14.	Fatty foods, because fats are digested by lypase of the bile which is secreted by the liver.	2
		<b>25</b>



## QUESTION-WISE ANALYSIS

Sr. No.	Objective +	Specification	Topic	Form	Marks	Est. Time	Est. Diff. Level*
1.	K	Recalls	Pancreas	Obj.	1/2	30 se.	C
2.	K	Recalls	Liver	Obj.	1/2	30 se.	C
3.	K	Recalls	Mouth parts	S.A.	2	3 mts.	B
4.	S	Drawing	Digestive system	S.A.	2	4 mts.	B
5.	U	Sees Relationships	Intestines	S.A.	2	3 mts.	B
6.	K	Recalls	Intestines	S.A.	2	3 mts.	C
7.	U	Sees Relationships	Stomach	S.A.	2	3 mts.	B
8.	U	Sees Relationships	Mouth parts	S.A.	2	3 mts.	B
9.	K	Recalls	Liver	S.A.	2	3 mts.	C
10.	K	Recalls	Metabolism	S.A.	2	3 mts.	C
11.	U	Sees Relationship	Metabolism	S.A.	2	3 mts.	A
12.	A	Sees Difference	Intestines	S.A.	2	3 mts.	A
13.	U	Sees Relationship	Liver	S.A.	2	3 mts.	B
14.	A	Suggests	Liver	S.A.	2	3 mts.	A
Revision						2 mts.	
Total 25						40 mts.	

+ K=Knowledge, S=Skill, U=Understanding and A=application.

\*A-Difficult, B-Average and C-Easy

ANNEXURE V

**Teaching Proficiency Scale**

Name of the Student Teacher \_\_\_\_\_ Subject \_\_\_\_\_  
 \_\_\_\_\_ Topic \_\_\_\_\_ Class \_\_\_\_\_  
 \_\_\_\_\_ Date of observation \_\_\_\_\_ Name of the  
 Observer / examiner \_\_\_\_\_

**Evaluation Scale**

After observing the trainee's lesson, give your rating on the following dimensions of teaching effectiveness:

	<b>Excellent</b>	<b>Very good</b>	<b>Good</b>	<b>Satisfaction</b>	<b>Poor</b>
1 Mastery of the knowledge content of the subject	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Effectiveness of Communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Ability to create and sustain interest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Quality of Questions asked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Quality of handling Children's answers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Use of Blackboard and other Teaching Aids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Quality of Concept Clarification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Promotion of Self Learning and Original Thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Use of Environment as a Teaching Resource	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Recapitulation of the lesson	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Over all Rating \_\_\_\_\_

Signature of the Examiner

**Peer Teaching Observation**

Name of the Student Teacher \_\_\_\_\_

Class \_\_\_\_\_ Roll No. \_\_\_\_\_

Number of Observation Records \_\_\_\_\_

Name and Designation of the Examiner \_\_\_\_\_

**Assessment**

Give your assessment of the

Nature of comments                      General  To the point  Mixed

Potential for improving                      High  Average  Low   
Classroom teaching

Approach of the Observer                      Meticulous  Casual  Very Casual

Marks / Grade \_\_\_\_\_

Signature of the Examiner with date \_\_\_\_\_

ANNEXURE VII

**Assessment of TLM and Teaching Aids**

Name of the Student Teacher \_\_\_\_\_

Class \_\_\_\_\_ Roll No. \_\_\_\_\_

Number of TLM \_\_\_\_\_

Name and Designation of the Examiner \_\_\_\_\_

**Assessment**

Relevance of TLM to the Curriculum	High	<input type="checkbox"/>	Average	<input type="checkbox"/>	Low	<input type="checkbox"/>
Cost Effectiveness	High	<input type="checkbox"/>	Average	<input type="checkbox"/>	Low	<input type="checkbox"/>
Age appropriateness	High	<input type="checkbox"/>	Average	<input type="checkbox"/>	Low	<input type="checkbox"/>
Potential for making Teaching Learning Interesting and Comprehensible	High	<input type="checkbox"/>	Average	<input type="checkbox"/>	Low	<input type="checkbox"/>

Marks / Grade \_\_\_\_\_

Signature of the Examiner with date

ANNEXURE VIII

**Construction and Administration of Tests**

Name of the Student Teacher \_\_\_\_\_

Class \_\_\_\_\_ Roll No. \_\_\_\_\_

Number of Questions / items \_\_\_\_\_

Types of Questions / items \_\_\_\_\_

Number of Tests Administered \_\_\_\_\_

Name and Designation of the Examiner \_\_\_\_\_

**Assessment**

Quality of Knowledge Questions      High       Average       Low

Quality of Understanding Questions      High       Average       Low

Quality of Application Questions      High       Average       Low

Comprehensibility and  
Appropriateness of language      High       Average       Low

Marks / Grade \_\_\_\_\_

Signature of the Examiner with date

**Assessment of the Case Study / AR Report**

Name of the Student Teacher \_\_\_\_\_

Class \_\_\_\_\_ Roll No. \_\_\_\_\_

Title of the Report \_\_\_\_\_

Name and Designation of the Examiner \_\_\_\_\_

**Assessment**

Suitability of the topic                      High  Average  Low

Appropriateness of the Methodology  
used    High  Average  Low

Suitability of the style of presentation      High  Average  Low

Usefulness of the Report                      High  Average  Low

Marks / Grade \_\_\_\_\_

Signature of the Examiner with date

ANNEXURE X

**Assessment of Trainees' Ability to Prepare Students for Participation in CCA**

Name of the Student Teacher \_\_\_\_\_

Class \_\_\_\_\_ Roll No. \_\_\_\_\_

Name of Activities in which the student participated / contributed \_\_\_\_\_

Number of school students whom the trainee helped / trained for participation in CCA. \_\_\_\_\_

Names of Activities for which the school students were prepared \_\_\_\_\_

**Assessment**

Extent of Participation in CCA	Substantial	<input type="checkbox"/>	Satisfactory	<input type="checkbox"/>	Meagre	<input type="checkbox"/>
Level of appreciation for Participation	High	<input type="checkbox"/>	Average	<input type="checkbox"/>	Low	<input type="checkbox"/>
Extent of training imparted to students	Adequate	<input type="checkbox"/>	Average	<input type="checkbox"/>	Inadequate	<input type="checkbox"/>
Level of appreciation for students' achievements / performance	High	<input type="checkbox"/>	Average	<input type="checkbox"/>	Low	<input type="checkbox"/>

Marks / Grade \_\_\_\_\_

Signature of the Examiner with date

ANNEXURE XI

**Community Living Rating Scale**

Name of the Student \_\_\_\_\_

Class \_\_\_\_\_ Session \_\_\_\_\_

Community Living Activities alongwith dates \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Rating Scale**

		O	VG	Good	S	NS
1	Contribution as team leader					
2	Contribution as team member					
3	Relationships with peers during the activity					
4	Co-operaton and helpfulness demonstrated during the activity					
5	Tolerance shown during different situations					
6	Adaptation to living conditions in community living situations					
7	Quality of work undertaken and performed					
8	Ingenuity in handling of unforeseen situations					

O – Outstanding

VG – Very Good

G – Good

S - Satisfactory

NS – Not Satisfactory

Over all rating \_\_\_\_\_

Over all grade \_\_\_\_\_

Date \_\_\_\_\_

Signature of the Faculty Supervisor



**Community Work Rating Scale**

Name of the Student \_\_\_\_\_

Class \_\_\_\_\_ Session \_\_\_\_\_

Community Work Activities alongwith dates \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

**Rating Scale**

Give your rating about the following :

		A	B	C	D	E
1	Empathy shown for the community					
2	Understanding of the community needs					
3	Contribution in the planning					
4	Contribution in the execution of the project					
5	Dedication and sense of service demonstrated during the activity					
6	Ingenuity in handling of unforeseen situations					
7	Readiness to work in difficult and disadvantaged situations					
8	Willingness to undertake community work and service					

A – Outstanding

B – Very Good

C – Good

D - Satisfactory

E – Least Satisfactory

Date \_\_\_\_\_

Over all rating \_\_\_\_\_

**Signature of the Faculty Supervisor**

**ANNEXURE XIII**

**Participation in Games and Sports Assessment Proforma**

Name of the Student \_\_\_\_\_

Class \_\_\_\_\_ Session \_\_\_\_\_

Athletic Events in which participated \_\_\_\_\_

Games played during the session \_\_\_\_\_

		A	B	C	D	E
1	Empathy shown for other team members/ participants					
2	Regularity and Commitment towards the game/ event					
3	Contribution made in terms of achievements					
4	Quality of skills demonstrated during the event					

A – Outstanding

B – Very Good

C – Good

D - Satisfactory

E – Least Satisfactory (Non-Participation)

Over all Grade \_\_\_\_\_

Date \_\_\_\_\_

**Signature of the Faculty Supervisor**

ANNEXURE XIV

**Viva Voce Assessment**

Name of the Student Teacher \_\_\_\_\_

Class \_\_\_\_\_ Roll No. \_\_\_\_\_

Name and Designation of the Examiner \_\_\_\_\_

**Assessment**

**Practical Teaching**

Level of understanding of School Curriculum      High            Average            Low     

Level of understanding of Methods of Teaching      High            Average            Low     

Capabilities of handling Unusual Classroom situations      High            Average            Low     

**Theory Courses**

Level of understanding of Core Concepts of various Theory Courses      High            Average            Low     

Capability to apply Theoretical Concepts in Practical and day to day situations      High            Average            Low     

Marks / Grade \_\_\_\_\_

Signature of the Examiner with date

**Portfolio Assessment**

Name of the Student Teacher \_\_\_\_\_

Class \_\_\_\_\_ Roll No. \_\_\_\_\_

Content of the Portfolio \_\_\_\_\_  
\_\_\_\_\_

Name and Designation of the Examiner \_\_\_\_\_

**Assessment**Approach towards preparation Of Lesson notes      Meticulous       Satisfactory       Casual Peer Teaching Observations      Meticulous       Satisfactory       Casual Relevance of TLM to school Curriculum      High       Average       Low Usefulness of TLM      High       Average       Low Quality of Case Study      High       Average       Low Quality of AR Report      High       Average       Low 

Marks / Grade \_\_\_\_\_

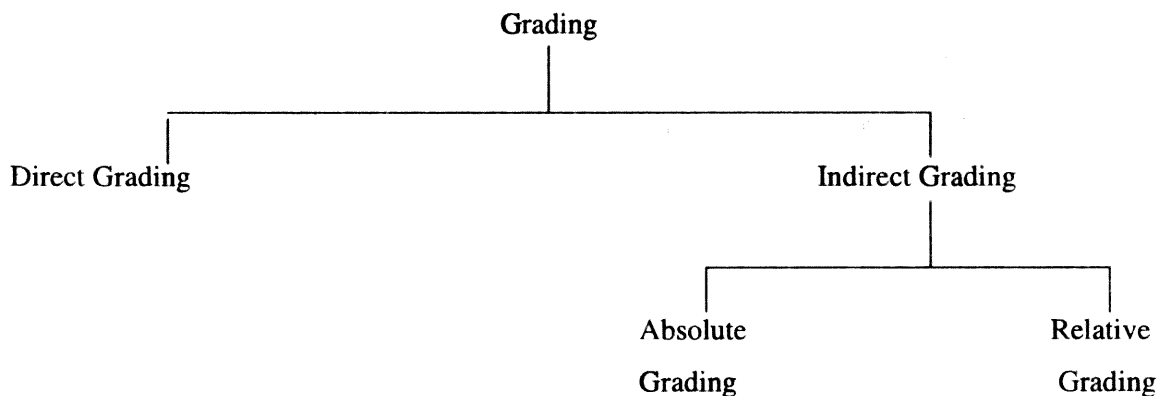
Signature of the Examiner with date

## A BRIEF NOTE ON GRADING SYSTEM

With 'grading; recommended to replace 'marks' for assessing pupil performance and its certification by the NPE 1986/92 it appears desirable to deliberate on the issue for exploring the possibility of this change-over, in the teacher education programmes.

It is first of all desirable to understand why this change in the age-old practice of awarding marks was suggested. In this context, it could be said that the suggestion was a reaction against the sacrosanct, pre-determined and universal use of the same boundary scores of 33%, 45%, 60% and 75% for classifying students' performance, in all subjects inspite of the wide variations in the usual ranges of obtained marks in different subjects, (say 00-100 in Mathematics and 30 to 80 in English), the use of these very boundary scores, in all subject for all examinations of all years (inspite of the varying levels of difficulty of the tests) and the varying groups of students with varying capacities, taking the different examinations).

The methods of awarding grades could be diagrammatically presented as under, which are also often called the types of GRADING.



Before proceeding further, it needs to be appropriated, that marks are points while grades represent ranges. This implies that in awarding marks, we profess to be point precise, while in awarding grades we make an estimate about the attained level of proficiency of

students, as falling within a particular broad range. In spite of grades being broad estimates, they are considered to be more accurate as compared to marks as in case of marks using 101 point scale, there is a likelihood of more mistakes occurring, than in using fewer (9 or 5 or 3 point scales) ranges.

## METHODS OF AWARDING GRADES

The diagram about the methods of grading needs first to be explained.

**Direct Grading** implies awarding grades on a decided scale (3 point or 5 point or 9 point) to each piece of performance. In an examination situation, this would mean awarding a grade to each question and then finding a Grade-Point Average of all the awarded grades, to find out the overall grade for the question paper as such. This, at the face of it, would be a cumbersome process and when the examiners even now commit so many mistakes, even in totalling-up marks, of different questions to get the total score for a question paper, the mistakes will get multiplied many times over, if they have also to calculate a grade point average, even though it involves simple arithmetic.

However, in situations where the number of candidates are few, the number of items to be evaluated are also not many and the grades have not to be combined or aggregated, direct grades could surely be used as in pre-primary classes.

**Indirect Grading** is the other form of grading where grades are derived on the basis of obtained marks and their ranges, which means that as usual, the teachers would evaluate items of performance in terms of marks and grades are calculated on the basis of marks.

One of the types of indirect grading is "**Absolute**" Grading, in which case the boundary scores of different grades are decided in advance of the examinations and in whichever range the obtained scores fall the examinee is awarded that designated grade. The proposition of awarding say 'A' grade to one obtaining 91 to 100 marks 'B' to one obtaining 81-90 marks and so on, is an example of absolute grading. In this situation, the students appearing in some subjects (like English), may not normally be able to get high grades mainly because of the

mark yielding nature of the subject, where the marks are usually spread over a range of say 30-80 marks. On the other hand, in subjects like Mathematics where the marks are spread over a range of 0 – 100 marks, many students may get higher grades as we see in the case of 'distinctions', most of which are awarded in Mathematics. In fact the cut scores of 33%, 45%, 60% and 75% too are examples of absolute grading which, in fact, prompted the NPE to recommend the replacement of marks by grades implying that relative grading should be used.

Absolute grades, however, have the merit of indicating, the level of performance of all individuals as such, without reference to the group and can thus motivate the student to strive for a higher level of performance. However, because absolute grades do not take into account the likely variations in the ranges of scores of different subjects, in regard to the difficulty level of question papers in different years, in respect of the levels of abilities of students appearing at different examinations in different subjects, in different years, they are not considered suitable for being used in large scale examinations.

Relative Grading presents a viable and a more technically sound proposition and an acceptable alternative, because the grade ranges as already mentioned are determined on the basis of the actually obtained scores, in each subject and in every examination. They are used all over the world in educational settings.

The concept of relative grading is based on the fact that if in a population (large numbers) any ability of any group is evaluated through any instrument, and the result is plotted on a curve, it would form a symmetrical, bell-shaped, Normal Probability Curve. If the base line of the curve is divided into a certain number of equal parts (say nine, five or three) and vertical lines (perpendiculars) are drawn from these points to touch the curve; the proportionate area of the curve enclosed by the curve and these lines, in respect of a nine point scale (division of the base line into nine equal parts) would constitute the following proportion from one side to the other viz. 4%, 7%, 12%, 17%, 20%, 17%, 12%, 7%, 4%. This area will be different in respect of different scale points.

This method of classifying performance levels of students on the above nine point scale, was introduced by the Air Force in the Second World War. It was named as the

“stanine” scale, a contraction of the term ‘standard nine’. Now, this is used very widely in education in different parts of the world.

In external teacher education examinations with a large number of candidates taking them, the stanine scale could surely be used taking the following steps”

- Arranging the obtained scores of candidates in a particular subject in the descending order’
- Determining cut off points for delineating the range for different grades - A for top 4%, B for next 7%, C for next 12%, D for next 17%, E for next 20%, F for next 17%, G for next 12%, H for next 7% and I for 4% of the scores for constituting different ranges
- Determining and deciding the grade to be awarded to each student in that subject obtaining marks falling with in a particular range.

It can be observed in this connection that:

- Grades would stand declared subject-wise for different examinees
- The same mark may correspond to a different grades in different subjects
- The concept of pass/fail is alien to the concept of Grading. However, for satisfying the statutory obligations regarding the necessity of a particular student to reach a qualifying level, (for eligibility to enter courses of higher education and for jobs) we may, for example in case of a nine point scale, take the last three grades as below the qualifying level
- When grades are awarded, it will be desirable to indicate marks along with the grades in the interim period
- Two types of certificates be awarded to the candidates – a Certificate of qualification to those who attain the qualifying level in all the required number of subjects. A certificate of achievement, may also be awarded to those who are not able to reach the qualifying level, in all the required number of subjects, giving the marks and grades in only the subjects in which he/she may have reached the qualifying level. This will eliminate the need for declaring students as “pass” or “fail” and also meet the needs of the market.



### **Grading in School Situations**

In schools the number of students are fewer in different classes. Therefore if we use a nine point scale, many of the slots may remain unfilled. Therefore, it is desirable to settle for a five point scale.

A compromise formula which could follow the basic principles of grading in a broad way is to identify the highest and the lowest obtained score in a subject at a particular examination, the difference would give us the range of scores. If we then divide this range into five parts we will be able to identify the boundary scores of the five grades in that subject in that examination. Allocating a grade to a particular score of a student on the basis of the division of the grade range will prove easy and will not be unscientific as well. In this case the last grade could be treated as unsatisfactory.

## Annexure - XVII

### Experts and Teacher Educators who participated in the Consultation Meeting held on November 2, 2007

1. Prof. A.K. Sharma  
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9. Dr. Shoib Abdullah  
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10. Dr. (Mrs.) S. Singh  
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12. Ms. Suman Bhatia  
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13. Prof. B.P. Khandelwal,  
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14. Prof. H.S. Srivastava  
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15. Prof. G.L. Arora,  
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16. Dr. Shardindu,  
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17. Shri Mrituanjay Jha  
Under Secretary and Coordinator of the  
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## **Abbreviations**

<b>AR</b>	<b>Action Research</b>
<b>BTC</b>	<b>Basic Teaching Certificate</b>
<b>CCA</b>	<b>Co-Curricular Activities</b>
<b>CCE</b>	<b>Continuous and Comprehensive Education</b>
<b>CR</b>	<b>Cumulative Record</b>
<b>D.Ed.</b>	<b>Diploma in Education</b>
<b>ETE</b>	<b>Information and Communication Technology</b> <b>Elementary Teacher Education</b>
<b>ETEI</b>	<b>Elementary Teacher Education Institution</b>
<b>GD</b>	<b>Group Discussion</b>
<b>ICT</b>	<b>Information and Communication Technology</b>
<b>JBT</b>	<b>Junior Basic Training</b>
<b>NCC</b>	<b>National Cadet Corps</b>
<b>NCTE</b>	<b>National Council for Teacher Education</b>
<b>SCERT</b>	<b>State Council of Educational Research and Training</b>
<b>SEP</b>	<b>School Experience Programme</b>
<b>TEI</b>	<b>Teacher Education Institution</b>
<b>TLM</b>	<b>Teaching Learning Material</b>
<b>TPI</b>	<b>Teaching Proficiency Index</b>