CONTINUOUS ASSESSMENT HANDBOOK

Prepared

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PROBLEMS OF CONTINUOUS ASSESSMENT IN BASIC SCHOOLS

Continuous assessment has been a feature of the Ghanaian school system for at least fifteen years now, that is, from 1987. It is unfortunate however, that continuous assessment has not made the expected contribution to pupils’ school performance due to the way it was conceptualized and due also to some other inherent problems in its operation. Some of these problems as well as the reasons why continuous assessment is considered an important feature in educational systems are discussed in this handbook. The handbook also spells out the benefits to be derived by redesigning the continuous assessment system and then provides guidelines for writing continuous assessment tasks. For purposes of distinguishing items and questions used in tests, we shall use the word ‘task(s)’ for items, questions and projects used in continuous assessment.

Continuous assessment in the school system currently comprises the following modes:

- 4 Class tests (marked out of 40)
- 3 Tests/quizzes (marked out of 40)
- 4 Project/Home work (marked out of 20)

A pupil is expected to complete 11 assignments per term based on the three modes. The total number of assignments per pupil then comes to 33 per year, per subject. The number of assignments increases at the Upper Primary and Junior Secondary School (JSS) levels because of the increased number of subjects studied at these two levels. Marks arising from the above modes are recorded. Apart from these, a teacher is expected to give other assignments as part of formative evaluation of classroom instruction. The marks from such assignments do not form part of continuous assessment.

At the Lower Primary School where five examinable subjects are presently taught (English, Mathematics, Environmental Studies, Ghanaian Languages and Culture, and Religious and Moral Education) a pupil has to carry out 165 assignments per year calculated as follows:

\[
11 \text{ assignments} \times 5 \text{ subjects} \times 3 \text{ terms} = 165
\]

Some of the problems that arise out of the rather extensive number of continuous assessment assignments are as follows:

1. **High level stress in test taking and test marking:**
   The first problem is the large number of assessments pupils have to go through, and the larger number of mark recordings teachers have to make.

   While a pupil takes or completes 165 tests and exercises a year at the Lower Primary level, a teacher in a lower primary class has to mark and record 19 marks per pupil, per subject, per term. In a year, the teacher has to mark and record 285 marks for each pupil in 5 subjects (19 x 3 terms x 5 subjects=285). If the class has 40 pupils, the teacher will have to mark assignments and make a record of 11,400 marks a year. This number of marks is arrived at this way:

   \[
   19 \text{ records} \times 3 \text{ terms} \times 5 \text{ subjects} \times 40 \text{ pupils} = 11,400
   \]

   The 19 records consist of the following:
11 assessment marks
3 total marks for each of class tests/quizzes, class exercises and homework
1 total mark for continuous assessment for the term
1 continuous assessment mark scaled to 30%
1 end of term examination mark
1 end of term exam mark scaled to 70%
1 Total mark for the term combining CA score and end-of-term examination score

The total of 11,400 mark records per teacher per year is extremely high and imposes severe stress on many classroom teachers.

2. Reduction in teacher/pupil contact hours
The large number of assessments also tends to reduce the number of contact hours for instruction in many public schools. In a number of schools, the two weeks before the vacation are used for marking outstanding tests and for completing the continuous assessment record books. Very little instruction is carried out.

3. Lack of emphasis on project work
Assessment modes (1) and (2) on page 1 are marked out of 40% each. Mode (3), consisting of projects and home work, is marked out of 20%. Teachers have not been trained on “project undertaking” and “project marking” and they therefore concentrate mainly on “home work”. In effect, the current continuous assessment system involves

- Class tests
- Class exercises
- Home work

No attention is given project work which is the most important learning medium that allows pupils to take active part in their own learning. Tests are used to collect data on pupils’ learning in the continuous assessment process. Tests by themselves do not lead to improved learning. Projects, by their nature, lead to greater learning.

4. Use of questions that require easier marking
Because of the large number of tests and exercises that have to be marked, there is the tendency on the part of teachers to use test questions that are easier to mark. These invariably are recall questions. High level ability questions that involve critical thinking and problem solving skills are rarely, if ever, used.

5. Lack of uniformity in continuous assessment procedures across schools
Since there is currently no formal training of teachers in the continuous assessment process, each teacher and each school tend to use their own separate ways for conducting continuous assessment. This tendency consequently creates lack of uniformity in the continuous assessment process in the country.

Schools have been provided “Record Books” which show exactly how continuous assessment marks should be recorded. The problem concerns the type and quality of tests, exercises and home work different schools set and record.

6. Lack of remedial instruction based on continuous assessment results
Very little remedial instruction based on continuous assessment results takes place in schools. This is essentially due to lack of time arising from the rather large number of assessments and other duties that the teacher has to carry out. The redesigned continuous assessment system has a built-in remediation system in the project component. The teacher is required to guide and advise the pupil as he/she goes through the various phases of the project, while making sure that the outcome of the project largely reflects the effort of the pupil.

7. Lack of moderation
The quality of continuous assessment is presently under the control of the classroom teacher, and one therefore cannot be certain of the quality of tests and other assignments used in the continuous assessment system. For continuous assessment to have the effects envisaged, there must be an accompanying moderation system aimed at authenticating the quality of tests set by teachers and the reliability of marks awarded by teachers. Circuit supervisors are required, as part of their work, to check the continuous assessment process in schools. But there will certainly be variations in the monitoring processes of circuit supervisors unless a more formalized continuous assessment moderation process is instituted in schools.

2

PURPOSES OF CONTINUOUS ASSESSMENT

The addition of continuous assessment in the instructional and testing process is intended to achieve two major purposes: to improve both the validity and reliability of the results of pupils’ performance on tests and exercises, and secondly to help the pupil to develop effective learning and work habits. The present continuous assessment system is essentially based on frequent test taking and does not really serve the two critical purposes of continuous assessment.
Classroom tests are based on assessment of lower level abilities and memorization. Where assessments are based on low level thinking skills i.e., “Knowledge” and “Comprehension”, pupils complete their education still unable to analyze and apply their knowledge to solve problems. Education, in effect is unable to transform the pupil from the stage of “knowledge recipient” to the status of “knowledge producer and problem solver”. The central purpose of continuous assessment is to help the pupil to become a better learner and producer by encouraging pupils to improve their knowledge and skills through learning, test taking and project undertaking in the critical and important objectives of the school curriculum.

The purposes of continuous assessment are achieved in the following ways:

1. **Longer time for collecting assessment information**

   To obtain accurate and reliable assessment data on a pupil, the assessments could be spread over a longer time, allowing the pupil to take tests and other assignments at different times throughout the course. The average of the scores for the various assessments is a more reliable indicator of the pupil’s performance in the subject than the score the pupil obtains in a one-shot examination.

2. **Use of different test forms and different test situations**

   By extending the time span for collecting assessment information throughout the duration of a course, different forms of testing and different assessment situations including acquisition and demonstration of practical skills can be introduced in the continuous assessment process. Practical skills such as the skills and competencies involved in conducting interviews, writing and presenting reports, presenting and analyzing data in graphical forms, and production of three-dimensional objects in a variety of subjects could be encouraged in schools to provide a more comprehensive and more valid assessment of pupil’s ability.

3. **Inclusion of more complex thinking skills in the testing programme**

   By extending the period for collecting assessment data, forms of knowledge and competencies that cannot be easily assessed under strictly timed conditions can also be assessed. High level thinking skills involving analytical thinking and problem solving skills and other competencies that require extended time for learning and for test response can then be added to the continuous assessment programme. The addition has the effect of helping pupils to acquire the habit of using high level thinking skills in a variety of situations rather than using pure memorization and other low level thinking processes.

4. **Teacher assistance and remediation**

   A further purpose of the continuous assessment process is to foster cooperation between the pupil and teacher especially in the area of pupils’ class projects. The process requires the teacher to provide assistance in the form of advice on various aspects of pupils’ projects. The pupil learns to consult the teacher, classmates and other sources on aspects of his/her project work, while maintaining his/her position as the leader in the project undertaking. This is the normal work procedure in the adult world where production is essentially based on cooperation and not on timed test situations.
Besides offering assistance as needed, the teacher is able to offer remedial help by using pupils’ common mistakes and misunderstandings for further improvement in class learning.

3

REDESIGNING THE CONTINUOUS ASSESSMENT PROGRAMME

A new continuous assessment system that redresses the shortcomings of the present system should lead to a transformation of the pupil from a passive learner to an active and effective learner and producer. To achieve this, the continuous assessment programme has been redesigned along the following guidelines:

1. **Reorganized assessment modes**

   The major purpose of the reorganization is to put more emphasis on “projects undertaking” to encourage pupils to use high-order abilities and other important skills involving the use of investigative and knowledge integration procedures.

   ‘Homework’ has been eliminated in the reorganization and more prominence given to ‘projects’ while maintaining the total number of modes at three. The justification for eliminating homework from the continuous assessment programme is that it is not certain
whether homework will be carried out unaided. Where homework contributes to pupils’ school assessment, it is reasonable to suspect that many pupils will seek extra assistance in carrying out their homework assignments. The reorganized assessment modes are now as follows:

Reorganized No. of Assessment Modes

i. Group Exercise
ii. Class tests
iii. Project (investigative, experimental and materials production)

2. Administration times for continuous assessment

The order for the class exercise and class tests will be as follows:

First Class Test: Week 4
Group Exercise: Week 8
Second Class Test: Week 11

The school term generally consists of 13 weeks. Completing the continuous assessments by end of Week 11, will therefore allow time for preparation and administration of End-of-Term school examinations in the twelfth or in last week of the term.

3. Design of the content of continuous assessment modes

The three continuous assessment modes, group exercises, class tests and projects have been redesigned in a way that will improve learning and general education performance in the country. Details of how the three modes have been redesigned are discussed below.

Group Exercise:
The group exercise for the term will be organized as “Group Work” and weighted 10%. The purpose of the group work is to introduce pupils to the principles and ethics of working together in groups to arrive at solutions together using the ideas and abilities of each group member.

The group exercise will be designed around one or two important but difficult specific objective(s) in the subject. In many cases, the two underlying objectives will be combined as a cluster objective for the purposes of the class exercise. The exercise is intended as practice over the selected objective(s). Marks will be awarded in relation to the effort and performance of each group.

The exercise will be conducted over two lesson periods, that is, 70 minutes, and will be problem-solving oriented involving the use of “knowledge” and “understanding” on material already learnt in class.

Class Tests:
Each of the two class tests for the term will be designed to cover the important objectives studied within a specified period. For example, the first class-test that comes after the first four weeks of the term will cover the important objectives studied in those four weeks. The second class-test that comes at the end of the eleventh week will consist of 20% of the instructional objectives of the first four weeks of the term and 80% of the instructional objectives from Week 5 – Week 11. An overlapping system for developing the second
class-test will ensure that pupils learn all the important instructional objectives taught in the term. Each class test will be weighted 20%, totaling 40% for the two tests.

**Class Test 1:** will cover basic knowledge and understanding of material taught in class.

**Class Test 2:** will involve the use of high-order abilities including understanding and interpretation, analysis of problems, creative application of principles and ideas to unfamiliar and real life situations, evaluation and estimation of situations. It is expected that classroom instruction will use real life and unfamiliar problems as illustrations to encourage pupils to apply their knowledge to problems of varying complexity.

**Projects:**
Projects will consist of investigations, experiments and material production in the subject of study. Projects will involve the use of high-order abilities such as analysis, evaluation, self-correction and synthesis of ideas and skills toward creation of a new product.

Lower primary pupils will complete two projects a term in each of English and Mathematics to enable them acquire extended practice of the essential skills of project undertaking.

A redistribution of the assessment modes, their frequency and weights for lower primary, upper primary and JSS are indicated in the table below.

<table>
<thead>
<tr>
<th>Assessments Modes</th>
<th>Lower Primary</th>
<th>Upper Primary and JSS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of assessments</td>
<td>Weight</td>
</tr>
<tr>
<td>i. Class exercise</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>ii. Class tests</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>iii. Project (investigative, experimental and material production)</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>

At the lower primary level, there will be 5 assignments per term consisting of one class exercise, two class tests and two projects. The class exercise will be weighted 10%; each of the two class tests will be weighted 20%, and the project will take the remaining and the largest weight of 50%, each project work being weighted 25%.

At the upper primary and JSS, the class exercise will be weighted 20%; each of the class tests will be weighted 20% and the project weighted 40%.

From Primary 1-3 the projects will be based on simple and fundamental issues and topics. Beginning from Primary 4, projects may use any of the following three approaches:

a.  *Fused curriculum approach:*
In this approach, a number of subjects may be fused together with one of them as the organizing subject. Environmental Studies for example is a fused curriculum organized around issues of the environment and bringing in science, geography, history and life skills as supporting parts.

Following this approach, a project task may be one that requires knowledge and competencies from other subjects. A task in English for instance may be set in a way that requires knowledge in mathematics and science. A mathematics task may be set in a way that requires application of knowledge in Environmental Studies etc.

b. *Emerging curriculum approach:*
This approach is based on the felt needs of relevant communities. Project tasks following this approach will be based on the critical needs of the localities where schools are based. Projects may also be based on felt national needs.

c. *Trans-disciplinary curriculum approach:*
This is a problem-centred curriculum approach where pupils have to draw on lessons from different subjects. Examples of topics using this approach are HIV/AIDS, democracy etc.

By this approach, a project topic may be set in a way that requires a blend of knowledge and competencies from different subjects.

In general, there will be 15 continuous assessment tasks (CAT) for the three modes in a year from Primary 1-3, and 12 continuous assessment tasks a year for upper primary and JSS. The following are the descriptions of the different CAT forms for upper primary and JSS:

CAT 1: This will be the first continuous assessment test for the year.
CAT 2: This will be the second continuous assessment task for the year. The task will consist of a group exercise.
CAT 3: Will be the second continuous assessment test.
CAT 4: Will be the project work
CAT 5 – 12 describe the continuous assessment tasks administered from the second term to the end of the third term. This means CAT 5-8 will be conducted in the second term, and CAT 9-12 conducted in the third term.
CAT 5 and 9 will test knowledge and understanding just as CAT 1 while CAT 6 and 10 will take the form of class exercise just as CAT 2 etc. The relationship between the CATs is as follows:

- First CA task for the term (Class Test): CAT 1, CAT 5 and CAT 9
- Second CA task for the term (Class Exercise): CAT 2, CAT 6 and CAT 10
- Third CA task for the term (Class Test): CAT 3, CAT 7 and CAT 11
- Fourth CA task for the term (Project): CAT 4, CAT 8 and CAT 12

At the lower primary, CAT will extend from CAT1- CAT15. The first term’s continuous assessment will consist of CAT1-5; the second term CAT6-10 and the third term CAT11-15.
4. **Effect of weights of continuous assessment modes on learning**

The weight for a ‘project’ in the table on page 8 is either 25% or 40% respectively at lower primary and at both upper primary and JSS. Combined with CAT 3, which is a class test involving the use of high-order abilities and weighted 20%, the total contribution of use of high level abilities in the continuous assessment programme will be about 70% for lower primary classes (i.e. CAT3 of 20% plus 2 projects each of 25% weight) and 60% for upper primary and JSS (i.e. CAT3 of 20% plus 1 project weighted 40%). This means that between 60% and 70% of continuous assessments will involve the use of high-level abilities including investigations and the generation of innovative solutions to selected project tasks. The actual percentage contribution of the “production component”, that is contribution of “application of knowledge and skills” and “projects” in the continuous assessment process, is calculated respectively at 18% and 21% (i.e. 30% x 60% for upper primary and JSS, and 30% x 70% for lower primary; where the 30% is the weight of continuous assessment and 60% or 70% is the combined contribution of the second class test and the project work). Between 18% and 21% of pupils’ class work will hence involve problem solving and practical production work. These percentages are clearly not enough to transform basic education. Further increases in the “problem solving and practical skill” component of pupils’ learning will therefore have to be made by redesigning the End-of-Term examination.

The End-of-Term examination accounts for 70% of the total marks for class performance. By redesigning the End-of-Term examination in a way that will include application and other high-ability test items, taking additional 20% of the total test marks for the term, it will be possible to increase the overall contribution of problem solving and practical production in the teaching and learning process to about 40%. This will then bring the proportions between theory and practice (receptive and productive skills) in the teaching and assessment system to 60:40.

The benefit of the increase in high-level abilities in the teaching-learning and testing programme of schools from present insignificant levels to 40% should have profound effects on the quality of knowledge and skills acquired by pupils and on their general school performance.

5. **Sample tasks and centrally developed projects**

Sample CAT1, CAT2 and CAT3 tasks, and their equivalents for the second and third terms, will be centrally designed by selected GES panels. Teachers will be expected to use the sample tasks as guides in developing CAT 1, 2 and 3 for their own classrooms.

CAT4 (Project) – Project tasks will be centrally developed and distributed to all schools in the country. (CAT 4 and 5 refer to project work at Primary 1-3).

Project topics will be developed by CRDD in cooperation with Teacher Education Division, the Inspectorate Division and other relevant educational bodies in the country to ensure that the quality of the projects pupils will be expected to carry out is of the right standard. For Primary 1-3 where pupils will carry out six projects a year, 12 project topics will be centrally developed and distributed to schools. This number will give schools the chance to select project tasks that are suitable for their localities.

For Primary 4-6 and JSS where pupils will undertake three projects a year, 6 project topics will be developed and distributed to all upper primary and junior secondary schools.
Pupils at all school levels will have three weeks to consider and choose the project topic they wish to undertake for the term.

6. **Priority Subjects at the different school levels**

A number of subjects have been prioritized for the new continuous assessment system in an initial arrangement. English and Mathematics for instance, are considered as priority subjects for basic and second cycle education. Arrangements for the new continuous assessment system will therefore focus on English and Mathematics in Primary 1-3. For Primary 4-6, the priority subjects will include English, Mathematics and Integrated Science.

For JSS, the priority subjects will include English, Mathematics and Science. Similar priority list including English, Mathematics and Integrated Science may be adopted for Senior Secondary Schools. Social Studies is a core subject at Senior Secondary School and should therefore be included in the priority list of Senior Secondary Schools. GES may also have to consider adding Social Studies to the priority list of JSS as funds become available.

7. **Role of the teacher in class projects**

The teacher will assist the pupil in

- Choosing a project topic for the term considering the pupil’s ability and interests
- Developing the logical sequence for the project outline
- Explaining the grading criteria
- Providing advice on sources of information
- Reading preliminary draft work or inspecting preliminary work product
- Providing individual advice as the project proceeds
- Using common misunderstandings of pupils and other relevant information to provide further information that will help pupils in their projects

8. **Grading criteria**

For project reports, the grading criteria will be as follows:

i. Introduction 20%
ii. Main text – Descriptions, analysis etc. 40%
iii. Conclusion and evaluation of results 20%
iv. Acknowledgement of assistance received and other references 20%

Where both acknowledgement and references are provided, each will be allocated 10%; where only one of the two aspects is applicable, 20% will be allocated to that aspect.

For projects that involve product development, the grading criteria will be based on the following:

i. Design 20%
ii. Craftsmanship 40%
iii. Originality 40%
By giving ‘originality’ 40% weight, a product that is not based on an original idea can only earn optimum marks totaling 60%, that is when graded solely on ‘design’ and ‘craftsmanship’. A product of this nature will therefore not be able to earn ‘A’ grade. Pupils who can earn ‘A’ grades will be those who demonstrate different levels of originality in their project concept and project execution.

9. **Number of school subjects**

*Lower Primary School*
Lower primary curriculum consists of five subjects:
- English
- Mathematics
- Environmental Studies
- Religious and Moral Education
- Ghanaian Languages and Culture

It is hoped that within the next few years as funds become available, the new continuous assessment will be extended to the remaining three subjects, that is Environmental Studies, Religious and Moral Education and Ghanaian Languages and Culture.

The curriculum of Upper Primary School and Junior Secondary School (JSS) includes the following subjects:

*Upper Primary School*

1. English
2. Mathematics
3. Integrated Science
4. Environmental Studies
5. Religious and Moral Education
6. Ghanaian Languages and Culture

*Junior Secondary School*

1. English
2. Mathematics
3. Science
4. Agriculture
5. Social Studies
6. Pre-Technical Skills
7. Pre-Vocational Skills
8. Religious and Moral Education
9. Ghanaian Languages and Culture
10. French
11. Music and Dance
12. Physical Education

In the present circumstances, the Upper Primary and JSS subjects could be divided into two batches and a phased plan developed for extending the redesigned continuous assessment to all subjects in the first batch and later to the second batch of subjects. For example, the following subjects at Upper Primary could be grouped in the first category: English, Mathematics,
Integrated Science and Environmental Studies; the remaining two subjects could then be covered in the new continuous assessment system as more funds become available. Similarly, the JSS subjects, excluding the two non-examined subjects Music and Dance and Physical Education, could be grouped into two batches and the new continuous assessment system extended to the second batch of subjects as the financial situation improves.

It is not necessary to list the number of Senior Secondary Schools subjects since they are close to 50. What is important, if funds are available, is to include the core subjects at SSS in the new continuous assessment system and then plan to expand the system to selected number of SSS subjects at a later time.

10. Moderation of continuous assessment

An external moderation system to accompany the new continuous assessment system will be essential. External moderation is a system for authenticating the quality of continuous assessment in schools and the marks teachers award for their pupils' work. Setting up a body of continuous assessment moderators will be expensive. A less expensive alternative will be to train circuit supervisors in continuous assessment moderation processes. The responsibility of circuit supervisors will be to take samples of pupils' continuous assessment work when they visit schools, remark the work and discuss the quality of work and any variations in the marks awarded by the class teacher and circuit supervisor with the teacher. The discussion between the circuit supervisor and the class teacher is intended to improve the quality of the tasks given for continuous assessment and to standardize the class teacher on marking and evaluation procedures for pupils' class work.
BENEFITS OF THE NEW CONTINUOUS ASSESSMENT SYSTEM

1. Reduced number of pupil assessments

The number of continuous assessments for the three modes, class exercise, class test and project in the new system is 5 per term for lower primary and 4 per term for upper primary and JSS, making a total of 15 and 12 assessments a year respectively. This means that lower primary schools will complete a total of 75 assignments in five subjects a year (15 assignments x 5 subjects) instead of the current 165 assignments a year, when the new continuous assessment system becomes extended to include all the five lower primary subjects. This constitutes 55% reduction in the number of continuous assessments the pupil currently has to complete in a year at the lower primary level.

2. Reduced number of mark recordings by classroom teacher

The table below shows the reduction in the numbers of assessments the pupil has to carry out per term (Row 1) and the reduction in the total number of marks the teacher has to record per term.

<table>
<thead>
<tr>
<th>Assessments and mark records</th>
<th>Current mark records</th>
<th>Redesigned mark records (LP)</th>
<th>Redesigned mark records (UP and JSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assessment marks</td>
<td>11</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2. Total marks for each of class tests, exercises and project</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. Total mark for CA for the term</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Total mark scaled to 30%</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5. End-of-term exam mark</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6. End-of-term exam mark scaled to 70%</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7. Total mark for CA and End-of-term examination</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8. MARK RECORDS</td>
<td>19</td>
<td>12</td>
<td>10</td>
</tr>
</tbody>
</table>

NOTE: The abbreviations LP and Up refer to Lower Primary and Upper Primary respectively.

In the redesigned continuous assessment system, a teacher at the lower primary will record 7,200 marks a year as against 11,400 mark recordings the same teacher has to carry out.
in the current continuous assessment system. The reduced number of recordings is arrived at as follows:

\[
12 \text{ records per term} \times 3 \text{ terms} \times 5 \text{ subjects} \times 40 \text{ pupils} = 7,200 \text{ mark records}
\]

This constitutes a reduction of 37% in the number of marks the teacher has to record a year for a class of 40 pupils in 5 subjects.

At the upper primary level, the reduced recordings, again assuming 40 pupils in class will be as follows:

\[
10 \text{ records per term} \times 3 \text{ terms} \times 6 \text{ subjects} \times 40 \text{ pupils} = 7,200
\]

This again constitutes a reduction of 37% in the number of recordings the teacher has to make a year in 6 subjects. The percentage reductions for pupil and teacher are indicated in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Current No. of assignments and recordings</th>
<th>Assignments and recordings under redesigned CA</th>
<th>Percent reductions in pupil assignments and teacher recordings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupil (LP and UP)</td>
<td>165</td>
<td>75</td>
<td>55%</td>
</tr>
<tr>
<td>Teacher (Lower Prim)</td>
<td>11,400</td>
<td>7,200</td>
<td>37%</td>
</tr>
<tr>
<td>Teacher (Upper Prim)</td>
<td>11,400</td>
<td>7,200</td>
<td>37%</td>
</tr>
</tbody>
</table>

Column 2 of the table shows the current number of assessments per pupil per year, and the number of mark recordings the teacher has to make a year at lower primary and upper primary. Column 3 shows the reduced number of pupil assessments and teacher mark recordings while Column 4 shows the percentage reduction in the number of pupil assessments and teacher mark recordings under the redesigned continuous assessment system.

Rows 1 and 2 equivalently show the reductions in number and percentage in the assignments the pupil and teacher will respectively undertake in the redesigned continuous assessment system.

An essential benefit of the redesigned continuous assessment system is that a pupil at both lower and upper primary will carry out 45% of the amount of work he or she has to do under the present continuous assessment system while the teacher has to mark and record 63% of the total number of marks he/she presently has to record presently resulting in savings of 37% of teacher effort.

We should note however, that the reductions affect the number of tests, exercises and projects given in the continuous assessment system and do not greatly affect the number of tests and exercises the class teacher has to give as part of the formative evaluation of instruction. This is an aspect of classroom instruction and evaluation that will need to be discussed and formalized for the guidance of teachers.

3. **Improved learning through pupil-centred practical projects**

A major problem in learning in the country presently is the low performance level of pupils in schools. The problem has a variety of causes. One of the major causes however, is the teacher-
centred approach predominantly used in the instructional system. The redesigned continuous assessment system emphasizes the pupil-centred instructional approach. This is achieved by planning assignments, i.e. class exercises and class tests, in a way that will involve the pupil more in 'analysis', 'application' and 'problem solving', and secondly planning the 'projects' component in a way that will require the pupil to carry out investigations and experiments, and produce tangible objects through personal effort using a variety of tools. The shift in emphasis to “projects” as indicated by the higher weighting shown on page 8, underscores the major purpose for redesigning the continuous assessment system, that is, to get pupils more involved in their own learning.

**Conclusion**

The redesigned continuous assessment system will have impact in three key sectors of the education system: on pupils’ learning, reducing the amount of work teachers have to undertake in the continuous assessment programme and thirdly, in improving the quality of education performance in the country.

**Pupils’ Learning Performance:** By reducing the number of assignments and putting more emphasis on projects, the pupil will have more time to get actively involved in the learning process and consequently be able to improve his/her intellectual and practical capabilities.

**Reductions in Teacher Workload:** The responsibilities of classroom teachers in the redesigned continuous assessment system will be made easier and less cumbersome compared to the present continuous assessment system. The reduction by 37% in the amount of work they have to do on continuous assessment will give them the chance to spend more time on other valuable aspects of the instructional process.

**Improvement in the quality of education:**

The reductions in the amount of continuous assessment work expected of pupils and teachers will provide teachers more time to achieve greater coverage of the school syllabus leading to improved pupils’ knowledge. The redesign of class tests and projects to emphasize analytical and product development will help pupils to acquire and use high-level thinking skills in a variety of situations. In effect, redesigning the continuous assessment system to introduce a greater degree of pupil-centred learning should raise the general level of educational performance in the country.

5

**EXPECTED PUPIL COMPETENCIES IN THE NEW CONTINUOUS ASSESSMENT SYSTEM**

Beginning from Primary 1, pupils will receive instruction in the following fundamental areas and their knowledge and skills evaluated through the continuous assessment programme. The fundamental skill areas are as follows:
These are some of the critical objectives of learning and scholarship in basic education, second cycle and tertiary education. The first two bulleted areas constitute important foundation skills in English and Mathematics, and also in Environmental Studies in Primary 1 and 2. The two skills are intended to teach

1. Observation
2. Recognition
3. Concept development
4. Drawing
5. Modeling

Selected examples of syllabus objectives relating to these skills in English and Mathematics are provided on pages 21 and 22.

Explanation of the areas above is as follows:

i. Observation and description

Observation

This is the ability to use the five senses to appraise a situation.

- Sight
- Smell
- Taste
- Hearing (Sounds)
- Touch (Texture)

Sight
When observing objects at close range, or from a distance, the pupil must be able to observe
a. length of object (estimation of length)
b. breath of object (estimation of breath: for P1-2, big, very big etc. P3 close estimate of breath)
c. depth of object
d. number of objects (estimation of number of objects within one’s vision using quick visual counting process)
e. space (length, breath, depth and characteristics of other materials surrounding the object(s))
f. shapes of objects observed and other objects within the space of the objects
g. colour of objects being observed and other objects within one’s vision
h. sense of beauty:
   • beautiful (colours, order etc)
   • ordinary
   • ugly (nasty)

Smell
Description of smell (odour) in terms of the following adjectives:
a. Pleasant, nice (like perfume, fresh grass, etc)
b. Nasty, bad
c. No smell

Taste
Description of taste in terms of the following:
a. Sweet
b. Salty
c. Bitter (sour)
d. Flat (no taste)

Sounds
Description of sounds in terms of the following:
a. Loud
b. Shrill
c. Soft

Touch (Texture)
Description of texture in terms of the following:
a. Rough (Coarse)
b. Smooth
c. Silky

Description/presentation of observation

Using the following presentation media:
• Verbal report
• Drawing/painting
• Sketch
• Modeling
• Role play

ii. Information and materials handling
Classifying, analyzing and presenting data using:
a. Tables
b. Bar graph
iii. **Using references**
Understanding and production of materials using each of the following:
- Word list or Glossary (available in some of the textbooks)
- Dictionary
- Encyclopedia
- Consultations (for opinions and ideas) with classmates, school mates and other friends and colleagues

iv. **Analysis of situations/problems (Critical thinking)**
   a. Determining significant parts of a problem (key issues; causes/effects)
   b. Determining errors/fallacies in arguments: logical and contextual errors
   c. Determining relationships between parts of a problem (causes, sources and their effects)
   d. Highlighting key points, relationships and generalizations in a situation/problem

v. **Problem solving (Generating solutions to existing problems)**
   a. Defining an existing problem (in words and/or illustrations)
   b. Considering alternative ways for solving a problem (in words and/or illustration)
   c. Creating a new solution that improves a situation or an object in use (in words, illustrations, or by developing a new object/device)
   d. Improving and refining the solution

Problem solving (Generating solutions to imaginary problems)
   a. Generating imaginary problems and situations that need to be solved.
   b. Defining the problem and providing reasons to show the importance of the problem
   c. Finding alternative solutions to imaginary problems and situations
   d. Selecting one of the alternative solutions for implementation (or developing one solution from two or more alternative solutions for implementation)
   e. Defining the solution to the problem (in words, illustrations, or by developing a new object/tool etc)

vi. **Projects: investigations, experiments and products development**
   i. Selecting project topic
   ii. Designing the investigation/experiment or envisaged product
   iii. Conducting the investigation/experiment or developing the product
   iv. Drawing conclusions from the investigations
   v. Evaluating and extending conclusions to other situations

vii. **Report writing and report presentation**
   a. Paragraph writing (See Prim. 3, Sect. 4 (Writing and Composition, Units 2-4)
   b. Selecting suitable titles
   c. Use of tables and graphs
   d. Concluding points
   e. Making summaries
   f. Presenting reports
      - Key points
      - Delivery
      - Conclusions
      - Responding to questions
Selected Specific Objectives on “Observation and Description” and “Information and Materials Handling” in Primary 1 and 2 (English and Mathematics)

The following are some selected syllabus objectives to illustrate the foundation knowledge and skills pupils are expected to acquire at Primary 1 and 2 in English and Mathematics. The foundation knowledge and skills are explained on pages 17-19.

**ENGLISH**

**Primary 1**

**SECTION 1: Listening and Speaking**

**Unit 1:** Listening, Reciting and Singing

1.1.3 enjoy the sounds of words in songs, rhymes/poems

**Unit 3:** Drama

1.3.2 talk about/describe scenes/events/things in stories/poems/sketches
SECTION 2: Grammar

Unit 9: Describing words
2.9.1 use simple describing words (adjectives) in sentences (e.g. red, white, brown, tall, short, small, round etc)

SECTION 3: Reading

Unit 1: Pre-reading Activities
3.1.1 recognize and identify various objects by shape, size, colour, height and length

SECTION 4: Writing and Composition

Unit 3: Drawing and Labeling
4.3.1 name and draw simple objects and label them (objects at home and in school)

Primary 2

SECTION 1: Listening and Speaking

Unit 2: Story Telling
1.2.3 dramatize whole/parts of, or imitate actions and sounds in a story

MATHEMATICS

Primary 1

Unit 1.2: Groups of objects

1.2.3 sort objects by the length and talk about them using such words as long, short, tall etc.
1.2.5 sort objects by their size (capacity) and talk about them using words such as big, large, small etc.
1.2.6 sort objects by their weight and talk about them using words such as heavy and light
1.2.7 compare the length, area, capacity and weight of two objects
1.2.9 arrange objects in order using length, area, capacity or weight

Unit 1.3: Counting objects

1.3.1 use one-to-one matching to find which group has as many objects as in a given group

Unit 1.12: Measurement of length, capacity and mass

1.12.1 compare the length/height of two objects and tell which is taller/larger/shorter

Primary 2
Unit 2.5:

2.5.1 state that the length or height of an object is more or less than that of a metre

2.5.3 estimate the length of given distances (objects) in terms of a metre

2.5.5 compare the weight of an object to a kilogram

7

GUIDELINES FOR SELECTING INSTRUCTIONAL OBJECTIVES FOR CONTINUOUS ASSESSMENT

To be able to help raise the level of learning in schools, continuous assessment will focus on instructional objectives that have the following characteristics:

- Are critical
- Not well taught
- Consist of a series of activities
- Require creativity and dedication

Explanation of each of the above characteristics is as follows:

i. **Critical Objectives**

These are the instructional objectives that have greater impact on the knowledge and skill development of pupils for the present and the future.

ii. **Syllabus areas and topics that are not well taught for several reasons**

These areas and topics must be distinguished from the critical objectives at (i) above.

Data from BECAS pilot tests administered at P3 and P6 in March 2005 showed that pupils have difficulties on the following syllabus topics:

*Mathematics (P3)*
a. Expansion of numbers:

Which is the expanded form of the number 3,080?
A. 30 + 80 + 0  
B. 300 + 80 + 0  
C. 3,000 + 100 + 0  
D. 3,000 + 80 + 0

b. Addition and subtraction involving more than two digits (H/V formats)
c. Multiplication and division sentences: 7 \times 3 = \underline{20} \div \underline{=20} 
d. Subtraction of fractions: \frac{5}{9} - \frac{2}{9} = 
e. Subtraction of fractions sentences: \frac{5}{9} - \frac{2}{9} = m \text{ Find } m.
f. Addition sentences: 214 + 337 + 648 = s \text{ Find } s.
g. Proportions
h. Word problems: Share 30 pencils among 5 pupils. How many pencils will each get?
i. Numbers in words to figures; from figures to words
j. Use of symbols: <; >

**English (P3)**

a. Subject/verb agreement  
b. Verb tense (past, perfect etc)  
c. Punctuation  
d. Requests (Use of: May I, please)

The above are areas/topics (both mathematics and English) that will need a lot of attention in redesigning the new continuous assessment system.

iii. Objectives that consist of series of activities

Some objectives may not necessarily be complicated. They are rather based on a series or repetitions of different sets of smaller activities leading to the accomplishment of a major learning or performance objective. Examples of such objectives are as follows:

a. Conduct interviews, analyze results and write a report  
b. Make a seedbed, sow seeds and undertake cultural practices  
c. Organize a recycling project in school or neighbourhood

The above are all important learning activities that need time to be carried out correctly. Such activities, by their nature, cannot be easily tested under timed conditions. Yet, they are very important in the education and training of the young
person and must therefore be assessed under the more relaxed continuous assessment process where pupils will be given enough time to carry out the set of activities till completion.

iv. **Objectives that require creativity and dedication till completion**  
(Objectives involving action verbs like develop, design, compose etc.)

Such objectives need time for their planning and accomplishment. Example objectives are as follows:

- a. Doing a painting of a scenery  
- b. Writing a poem or composing a musical piece  
- c. Writing a drama piece  
- d. Developing a model by sketch or drawings  
- e. Developing a sculpture or three dimensional product  
- f. Analyzing data and writing a report  
- g. Collecting and putting data into charts  
- h. Solving mathematical problems on realistic projects  
- i. Detecting faults in a machinery, in a piece of writing and proposing alternative solutions  
- j. Developing a circuit diagramme for electricity supply to an improvised building  
- k. Presenting reports

Example objectives that fit any of the four characteristics should be determined by examining the respective syllabuses. It is suggested that the same procedure for identifying instructional objectives with any of the four characteristics should be followed to select a body of instructional objectives to be used for continuous assessment at Lower Primary, Upper Primary, JSS and also at the Senior Secondary School levels.
GUIDELINES FOR DEVELOPING CONTINUOUS ASSESSMENT TASKS

This section of the handbook provides guidance on the processes for developing tasks based on selected instructional objectives.

A. Selecting and Developing Objectives for Continuous Assessment

(1) Select instructional objectives based on the four defined characteristics
Using a panel, do the following:

i. Beginning from Primary 1, read through the syllabuses for English, Mathematics and other subjects in the priority list of subjects and identify those objectives with any or all of the four defined characteristics i.e.

- Critical
- Not well taught and therefore not learnt well
- Consists of a series of activities
- Require creativity and dedication to completion

Write each objective identified and selected separately under each of the four categories of objectives.

Write the syllabus reference number for each of the objectives selected.

ii. Begin from Primary 1 and select the foundation objectives and skills for the objectives identified (See examples of foundation objectives and skills on pages 17-19).

iii. Follow the processes at (i) and (ii) and select relevant objectives from Primary 1 to Primary 6, and on to JSS.

iv. Check each of the selected objectives and make sure those selected at P1 lead directly to associated objectives at P2 and P3 such that learning the selected objectives at P1 will directly enhance learning of associated objectives at P2 and P3.
(2) **Build clusters of instructional objectives**

Some instructional objectives are critical in themselves. These may be single objectives that can be isolated for purposes of continuous assessment. New objectives may however be created by combining a number of objectives in the syllabus to form a cluster of objectives. A new cluster objective then becomes an objective with most or all of the four characteristics already defined above.

**B. Writing Continuous Assessment Tasks**

Each of the four objective characteristics defined on pages 23 and 26 describes different types of continuous assessment tasks.

There are however, cases where a selected objective may have more than one of the four characteristics necessary for selection for the continuous assessment programme. For instance, in English at Primary 3, the topic on subject/verb agreement is critical and at the same time difficult and not well taught. The topic therefore has three of the four objective characteristics already discussed.

With the above example in view, the procedure for writing tasks for continuous assessment will be as follows:

1. **Stratified pool of syllabus objectives**

   Put the objectives selected or developed for each of (1) and (2) on the previous page into a pool. The pool will have four different sub-categories of specific objectives and cluster objectives.

   Each objective must have its objective reference number and category number. If it is a cluster objective, the reference numbers of the objectives from which the cluster objective was developed must be written against the new cluster objective.

2. **Task specifications**

   Write task specifications for each of the objectives in the pool.

   Specifications must be written in a way that also captures the appropriate competencies at pages 16-19. The process will be as follows:

   i. Select a learning objective from the pool.
   ii. Select appropriate competencies for the learning objective.
   iii. Write the task specifications for the objective. A task can be adequately specified by a question or item format.
   iv. Modify the task specifications to include the appropriate competency or competencies.

3. **Sample tasks**

   Following the task specifications at (2) above, write at least three sample tasks for the objectives in the sub-categories of the item pool.

4. **Edit**

   Edit completed sample tasks to ensure the following:
i. clarity (i.e. lack of ambiguity)
ii. appropriateness to class level (primary, JSS or SSS)
iii. measurable and achievable

5. **Marking scheme**

Different levels of complexity of the marking scheme may be adopted for lower primary, upper primary and JSS. For written work, including reports of investigations and experiments at lower and upper primary levels, the marking scheme will be based on the following:

<table>
<thead>
<tr>
<th>Process</th>
<th>(30%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data analysis</td>
<td>(40%)</td>
</tr>
<tr>
<td>Conclusion</td>
<td>(30%)</td>
</tr>
</tbody>
</table>

Process includes the manner in which an investigation etc. is conducted. Data analysis includes use of charts, computations etc. Process and Data analysis together take 70% of the marks. Conclusions include statements on the significance of the work and how they could be applied. Conclusions are important because every investigation and every experiment is toward a purpose. The pupil/student carrying out the investigation or experiment must therefore state the conclusions very clearly otherwise the work undertaken would be purposeless. The conclusion may be very simple, but it is still very important and carries a lot of weight.

At the JSS level, the marking scheme will consist of the following aspects and their respective weights:

<table>
<thead>
<tr>
<th>Introduction</th>
<th>(10%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>(20%)</td>
</tr>
<tr>
<td>Data analysis</td>
<td>(40%)</td>
</tr>
<tr>
<td>Conclusions</td>
<td>(20%)</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>(10%)</td>
</tr>
</tbody>
</table>

Assignments in mathematics at lower primary, upper primary and JSS will use the following marking scheme:

<table>
<thead>
<tr>
<th>Computations</th>
<th>(40%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasoning</td>
<td>(60%)</td>
</tr>
</tbody>
</table>

Reasoning has been given greater weight for the obvious reason that it is “a productive skill”. It requires the pupil to think through a problem, analyze it, and then bring together a number of principles and processes to solve the problem.

For tasks that require “creativity and dedication till completion” as in the guidelines at pages 24 and 25 (iv (a)-(k)), the marking scheme will be based on three dimensions: design, craftsmanship and originality.

Design is the translation of a concept by illustration or by product. Craftsmanship is the execution of the concept using tools, shapes, colours etc. Originality is whether the
concept has been developed by the person himself or herself and is not copied from some other source.

Originality will include the following:

- Slight additions or modifications to an existing idea or product
- Fairly extensive additions or modifications to an existing idea or product
- Completely new idea or product

The three dimensions may be weighted differently for lower primary, upper primary, JSS and Senior Secondary School. The recommended weights for the four school levels are as follows:

**Recommended Weights for Practical Projects**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Primary 1-3</th>
<th>Primary 4-6</th>
<th>JSS</th>
<th>SSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>25</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Craftsmanship</td>
<td>25</td>
<td>30</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Originality</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

The weight for originality is far higher at the lower primary level than at the other school levels. The reason is that children at ages 6-9 are very imaginative and this needs to be encouraged and sustained. Their skills in design and craftsmanship at this stage are not well formed in comparison to their imagination. At the upper primary, the weight for originality is reduced to 40% and the weights for design and craftsmanship increased to 30% each to encourage pupils to improve their competence in these two dimensions. Originality at both lower and upper primary has been weighted more heavily to encourage innovation and creativity in schools.

A similar weighting system is adopted for JSS and SSS. It may be noticed that ‘craftsmanship’ attracts the highest weight at these two school levels as a way of encouraging pupils/students toward greater achievement in ‘craftsmanship’. It may secondly be noticed that the weighting system makes it difficult for a pupil/student to obtain grade ‘A’ in a piece of work if the pupil does not demonstrate some originality as well. For instance, if the cut-off score for grade ‘A’ is 75%, then it will be types of work that demonstrate some levels of ‘originality’ that can obtain grade A, that is if the work is also quite good in design and craftsmanship.
RECOMMENDATIONS FOR
COMPILING ASSIGNMENTS FOR CONTINUOUS ASSESSMENT

A lot of the issues raised in this section have already been discussed on pages 7 and 8. This section nonetheless provides detailed summary of the issues already discussed.

It is expected that District Education Offices will control the class assignments that will be administered in the continuous assessment programme. Task specifications will be provided the District Education Offices (DEOs) who will then be expected to develop the tasks to be administered at various points in the continuous assessment programme.

The following recommendations are made on the coverage and nature of the specifications for each of the three continuous assessment modes.

1. Class Test 1 (CAT1)

Short class tests and quizzes should be given by the teacher to collect formative data for improving instruction in class. The first class test (CAT1) that should be recorded for continuous assessment will be administered after the first month in school and should cover objectives studied up to the point of test taking.

_Purposes of the Class Test (CAT1)_

The first class test will be designed to assess “knowledge” and “understanding” of the important instructional objectives taught in class from the beginning of the term to the point where the test is taken.

Knowledge is simple recall of factual information relating to principles, methods etc. “Understanding” refers to the ability to summarize information in one’s own words, illustrate information, interpret information or explain information in the same context within which it was learnt or acquired. Although the syllabus writes “knowledge and understanding” as one dimension, the two are actually two separate dimensions and teachers are therefore expected to teach the dimensions separately.

_Test Dimensions_

The test will follow the weights of the dimensions as specified in the syllabus for the different class levels. The weights for English and Mathematics at the lower primary school for instance, are as follows:

**English**

- Knowledge: 40%
- Understanding: 60%

**Mathematics**

- Computations: 40%
- Application of knowledge: 60%
This means that 20-item test administered at the lower primary will consist of 8 items on “knowledge” and 12 items on “understanding”.

Specifications for setting the class test

District Education Offices (or schools) will be provided with the following:

a. List of objectives considered important and which can be answered in timed-test situations.
b. Item/question format
c. Sample items and questions

Primary 1 CAT1 may consist of 10 test items to be answered in a class period of 35 minutes.

Primary 2 and 3 tests may consist of 15-20 test items to be answered in 45 minutes. A class test may also consist of 2-4 questions framed in such a way as to call for “knowledge” and “understanding” of issues in the questions.

We must understand however, that the syllabus sub-divides the two dimensions of English into the four skills shown in the first row of the table below:

<table>
<thead>
<tr>
<th></th>
<th>Listening Comprehension</th>
<th>Reading</th>
<th>Speaking</th>
<th>Writing</th>
<th>Total Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and understanding</td>
<td>10</td>
<td>30</td>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Use of knowledge</td>
<td>-</td>
<td>-</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
</tbody>
</table>

“Knowledge and understanding” is studied and tested by listening comprehension and reading. Understanding a message by listening, or understanding and answering questions based on a passage read, all involve receptive skills. A pupil listens or reads a passage to receive some information. What is required is for the pupil to react to the information received. On the other hand, the “use of knowledge” involves the production skills of speaking and writing. The two skills require the pupil/student to produce some new information himself or herself. The weights specified in the cells of the table must be taken into account in developing the class tests, group exercises and projects in English.

“Listening comprehension” will take a much longer time to test. For this reason, it could be tested on different days during the week (possibly the 5th week). “Speaking” also takes a longer time to assess and could also be tested during the week when “listening” is being tested. Reading and writing could be tested in the same test paper in 45 minutes.

2. Group Exercise (CAT2)

The group exercise will also focus on “knowledge” and “understanding” of important and problematic topics studied in class.
Purposes of the Group Exercise

a. The purpose of the group exercise is to provide further practice on specific problematic instructional area/topic(s) in the syllabus leading to more understanding of principles, methods and processes involved in the topic(s).

b. The exercise will essentially be given as group work to be completed, as said earlier, in two lesson periods of 70 minutes.

Test Dimensions

The group exercise is intended to assess more of “understanding” than “knowledge” per se. For this reason, the weight of “understanding” in the group exercise will be more than the weight of “knowledge”. For English and Mathematics at all school levels, and also for all other subjects, the group exercise will focus more on understanding. The weights of the two profile dimensions in the group exercise will be as follows:

a. Knowledge 30%
b. Understanding: 70%

Specifications for the group exercise

District Education Offices will be provided with the following:

a. List of topics/areas on which group exercises could be developed.
b. Item/question format
c. Sample items/questions based on knowledge 30% and understanding 70%.

3. 2nd Class Test (CAT3)

While the first class test (CAT1) and the group exercise (CAT2) will focus more on “understanding”, the second class test (CAT3) to be administered after the 11th week, or just before the End-of-Term test, will be based on tasks that assess the profile dimensions by the weights specified in the syllabus.

Test dimensions

English for all primary classes, will be tested following the weights specified in the table at page 31. Mathematics for lower and upper primary, will be tested by the following dimensions and weights:

<table>
<thead>
<tr>
<th></th>
<th>Lower Primary</th>
<th>Upper Primary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and understanding</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>Application of knowledge</td>
<td>60%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Explanation of the profile dimensions “knowledge” and “understanding” has already been provided on previous pages. This leaves explanation of “use of knowledge” or “application of knowledge”. The two names of the dimension are used interchangeably.

Use of knowledge is considered high-ability or high-level thinking and performance. Use of knowledge involves three separate dimensions of knowledge and skills as follows:
• Application of principles, methods and procedures for solving new problem situations other than those situations used as class examples.
• Analysis of issues (Reasons, causes and/or effects)
• Developing, generating or planning solutions to new problem situations that may be real life or imaginary i.e. synthesis of ideas, principles and methods for producing a new solution to real life or imaginary problems.

The profile dimensions (and their respective weights) to be used in all subjects are available in all the syllabuses.

As noted in the profile dimension weights in the syllabus, CAT3 will focus more on assessing high-ability which involves the above bulleted knowledge and skills.

**Developing CAT3**

The tasks that will compose CAT3 will be selected from syllabus objectives expected to have been studied between the first month of the term and the end of the term, that is objectives studied after CAT1.

**Specifications for CAT3**

As in the case of CAT1 and CAT2, District Education Offices will be provided with the following:

a. List of topics/areas on which CAT3 could be developed.
b. Item/question format
c. Sample items/questions based on the dimensions and their respective weights depending upon the subject.

4. **Projects for Lower Primary School**

Since there will be two projects at the lower primary, the number of assignments at this level will be 15 per year while it will be 12 per year at upper primary and JSS.

**Purpose of the projects**

The purpose of the projects is to help the pupil to apply knowledge acquired to solve theoretical and practical problems that are different from those dealt with in class. A project will hence be an application of learning to essentially non-classroom problems/situations.

Projects are aimed at giving pupils essential practice in the following:

i. Apply their learning to produce something of their own
ii. Work methodically over extended period of time to complete a project
iii. Present their ideas and work to class and answer questions

Projects are expected to demonstrate essentially high-ability knowledge and skills, but may also involve low level thinking skills particularly “understanding”. A project
may involve theoretical knowledge, such as writing a paper, or demonstration of practical abilities including carrying out a painting, investigation and reporting, or the creation of a product based on some criteria.

**Project selection and completion**

**Lower Primary**
Project work at the lower primary will refer to CAT4 and 5 for the first term; CAT9 and 10 for the second term; and CAT14 and 15 for the third term. CAT numbers and their equivalent terms are indicated in the table below.

<table>
<thead>
<tr>
<th>CAT numbers and equivalent terms</th>
<th>School Terms</th>
<th>CAT Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Term</td>
<td>CAT4 and 5</td>
<td></td>
</tr>
<tr>
<td>2nd Term</td>
<td>CAT9 and 10</td>
<td></td>
</tr>
<tr>
<td>3rd Term</td>
<td>CAT14 and 15</td>
<td></td>
</tr>
<tr>
<td>Total Number of Projects per year</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

At the lower primary, pupils will select their first project topic by the end of the first week of the term and submit the completed at the end of the sixth week of the term.

They will select the second project topic in the seventh week of the term and submit the completed project at the end of the twelfth week of the term. This means pupils will have five weeks to complete each project.

The total number of projects to be completed from Primary 1-3 will hence be 18

**Upper Primary, JSS and SSS**
At these school levels, the nature of projects is expected to be more demanding. Pupils/students will carry out one project per term and three projects per year.

The total number of projects expected to be completed at lower primary, upper primary, JSS and SSS are indicated in the table below.

**Expected number of completed projects at school levels**

<table>
<thead>
<tr>
<th>School Level</th>
<th>No. of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Primary 1-3</td>
<td>18</td>
</tr>
<tr>
<td>Upper Primary 4-6</td>
<td>9</td>
</tr>
<tr>
<td>JSS 1-3</td>
<td>9</td>
</tr>
</tbody>
</table>
Assessing projects

Projects will be assessed on the criteria described on page 11. Written projects will be assessed on the following aspects: introduction, main text, conclusions, acknowledgements and references. Three-dimensional project output will be assessed on design, craftsmanship and originality.

At JSS and SSS, for projects such as painting or the production of three-dimensional pieces, these will be accompanied by a written paper of no more than 1,000 - 1,500 words. For example, a student who opts to produce a painting should write a short paper describing the work of one or two painters in the country or outside the country. The description of the work of the selected painter(s) must have some bearing on the student’s work being presented.

For such projects, the assessment will be separately done for the two aspects of the work using the following weights:

- Written paper: 30%
- Practical work: 70%

5. End-of-Term Test

Purposes of the end-of-term test

The end-of-term test serves three major purposes:

a. to assess the pupil’s learning over the objectives taught in the term
b. to evaluate individual and class strengths and weaknesses in aspects of the syllabus taught in the term
c. to provide a report on pupils’ class work for the term to parents and to the school

Profile Dimensions

The profile dimensions to be tested, and their respective weights, will follow the specifications in the syllabuses.

As much as possible, the test paper must consist of more items/questions on “application”, “analysis”, “synthesis” and “evaluation”. Where between 2-5 questions are used, they must be structured in a way that they test high-level ability.

Specifications for End-of-Term Test

District Education Offices will be provided with the following:

a. List of topics/areas for the term
b. The dimensions to be tested and their respective weights
a. Question/item format
b. Sample questions/items

*Developing the End-of-Term Test*

First term test: The test will cover the syllabus objectives expected to have been taught in the first term.

Tests for the second and third terms will be overlapped by including a proportion of syllabus objectives from previous terms. The suggestions for developing the second and third term tests are as follows:

Second term test: the test should be composed as follows

- 30% of instructional objectives of the 1st Term
- 70% of instructional objectives covered in the second term

Third term test: the test should be composed as follows

- 20% of instructional objectives for 1st Term
- 20% of instructional objectives for 2nd Term
- 60% of instructional objectives for first half of 3rd Term

The purpose of linking the end-of-term tests is to emphasize to pupils/students that learning is a continuum and not segmented into separate terms.

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**ISSUES FOR DISCUSSION AND DECISION**

A. *Continuous Assessment Development Issues*

1. The body to be responsible for supplying items/questions and project tasks to schools

2. Training programme for the body at (1) in selecting continuous assessment tasks and writing task format for class tests, group exercises, projects and end-of-term tests.

3. How many times in a term the teacher must give non-recorded home work, group exercises and quizzes as formative evaluation of instruction, outside of continuous assessment.

4. Training of continuous assessment moderators (Circuit Supervisors/inspectors and retired school teachers etc)

5. Responsibilities of continuous assessment moderators
B. Implementation Decisions

1. CRDD to discuss issues at (A) with the following GES Divisions:
   - Basic Education Division
   - Teacher Education Division
   - Inspectorate Division

2. Decisions on pilot schools and duration of pilot

3. Implementation of new CA in schools. Possibility of implementation on phased basis: 5% of schools in Year 1; 10% in Year 2; 25% in Year 3; 50% in Year 4 etc.

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