

Continuous Formative Assessment Guidebook for Primary Education (Classes PP to VI)



**Royal Education Council
Paro : Bhutan**

2019

Published by

Royal Education Council

Royal Government of Bhutan

Paro, Bhutan

Tel: +975-8-271226

Fax: +975-8-271991

Website: www.rec.gov.bt

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First Edition 2019

ISBN

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The Royal Education Council acknowledges the contribution made by Principals and teachers from various schools.

FOREWORD

The Ministry of Education collaborates with the Royal Education Council (REC), Bhutan Council for School Examinations and Assessment and other relevant partners in its mission to provide an education that is guided by the ideology of nurturing “nationally rooted and globally competent” citizens. With the changing time, the education sector is continuously confronted with different sets of challenges. One of the current challenges is ensuring the quality and depth of learners’ learning in the light of their emerging and diverse needs and that of the society’s.

To address this challenge, the National Education Conference (2019) directed the relevant agencies to reconsider the current ways of learners’ learning assessment and propose alternative methods. Consequently, the Curriculum and Technical Advisory Board (2019) resolved to strengthen the continuous formative assessment (CFA) and do away with the written examinations for classes PP-V. The move to adopt CFA has been adopted as it easily facilitates competency based learning, assessment for learning and assessment as learning thereby helping learners develop to their knowledge, skills and values. CFA also enables teachers to gather information about the learners’ progress and learning needs and use these information to make instructional adjustments.

Since the change entails a lot of work like reviewing the curriculum text books and the guidebooks, designing tools and techniques, the CFA shall replace all forms of assessment for only classes PP to III from 2020 academic session. The change in other classes, IV to VI, will be made in the next phase.

The change also entails building the professional capacity of teachers to effectively carry out CFA regularly in their classes. For this, the Ministry of Education and the REC will provide training on CFA to all the teachers teaching primary level. Further, a framework on CFA has been developed and it will be distributed to all the primary schools.

With these initiatives, REC envisages improved learner achievement and performance through consistent feedback system and by adapting teaching strategies to learners’ diverse needs and interest. This is also to promote inclusive assessment whereby learners demonstrate achievement in different forms of task and activities.

We hope that our teachers practice CFA consciously with purpose by placing learners in the centre of all educational endeavours.



Kinga Dakpa
Director General

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Glossary

Assessment

Assessment is a process of understanding and improving learners learning. It involves setting appropriate criteria and high standards for learning quality; systematically gathering evidences, analysing, and interpreting to determine performance of learners and the efficacy of instruction targeted to improving teaching and learning process.

Assessment Auditing

Assessment Auditing refers to a systematic and documented process for obtaining evidence to determine whether assessment tasks and related learners' outcomes comply with curriculum standards and the assessment protocols.

Benchmark

A benchmark is a reference or criterion against which learning performance can be measured and evaluated. In the context of assessment, benchmarks are specific points of reference related to performance or outcomes against which learners' work is monitored and measured.

Competencies

Include skills, knowledge, attitudes and values that interact in ways that lead to specific actions, and they are linked to all the learning areas and outcomes of the curriculum.

Continuous Formative Assessment (CFA)

CFA is an ongoing process that teachers and learners use during the course of instruction to understand where learners are in their learning and to take immediate action to address the learning gaps.

It provides both teachers and learners with real-time information about how learning is progressing and of the teaching and learning process.

Evaluation

Evaluation is an assessment of the worth of a programme or a project. It is about whether a programme or project has met the objectives for which it was designed.

Grade

A letter or a numerical grade is assigned to bands of performance to reflect how well assessment criteria have been met. Grades can also be used in the award of certificates to indicate the level of achievement across a programme or study.

Meta Cognition

Metacognition refers to being aware of one's own knowledge and thought processes. It is 'thinking about thinking'. Learners demonstrate metacognitive skills when they show awareness of their own learning process, define their learning goals and strategies and give due consideration to the resources required for the task.

Observation performance data

Data collected and documented by the teacher to gauge specific skills, behaviors, or dispositions of individual learner in the class.

Outcomes

Outcomes are the end products of a learning process. The outcomes are stated at the beginning of a learning activity or course of study and clearly indicate what learners should be able to demonstrate at the end of the process.

Performance assessments

Assessments designed to provide learners with an opportunity to demonstrate their knowledge and higher-order thinking skills to explore and analyze a complex, real-world scenario. This form of assessment involves observing a learner perform on an assessment task and evaluating the end product.

Portfolio

Portfolios are designed to document a learner's effort, progress, and achievement by a systematic collection of work collected over time. Portfolios may contain work artefacts, assessment scores, essays, learner's journal or notes and products. Portfolios may be in written or electronic form and can assist in measuring growth by looking at work done by the learner at different time periods.

Test

Assessment is about making decisions on learning based on evidence for which a test can be one of many means of collecting this evidence.

Tracking

Tracking refers to the process of collecting and using assessment data to monitor learners' learning and growth over time, at different times and against educational standards. Its primary purpose is to help improve learning.

INSTRUCTIONS FOR SCHOOLS

As per the directives of the Government and the resolution of the 19th National Education Conference, the examinations in primary classes have been phased out. At the initial phase, examinations in classes PP to 3 has been phased out with effect from 2020 academic session. Later, it is expected to up-scale till class 5. Mainly to facilitate students learn and develop competencies in the learning subjects through rigorous continuous formative assessment (CFA) and feedback system.

The effective implementation of CFA calls for unfailing support and collaboration from Dzongkhags and schools and other relevant stakeholders. Towards ensuring that the CFA delivers the desired outcome, it is crucial to establish enabling condition for the change. The Department of School Education, Ministry of Education therefore necessitates Dzongkhags and schools to make the following arrangement and adjustments.

Curriculum recommendations for implementation of CFA

1. Do away with the existing written examinations, unit tests, monthly test and class test practices. However, test as a form of assessment techniques within the CFA is recommended in the respective subjects.
2. By doing away the written examinations viz, mid-term and annual, classes PP to III will gain additional 20 instructional days. Hence, it is recommended that the schools use these additional days to continue teaching.
3. Besides the assessment tools and techniques that are integrated in the respective subjects, the teachers are encouraged to design and use diverse assessments techniques and tools as per the curriculum learning standards and objectives.
4. In order to keep track of the student learning, a personal file or portfolio for each student for each subject needs to be maintained. The file should contain all the records of students' learning which includes, work sample, assessment records for all subjects, interventions provided, remedial, and personal traits records.
5. Every subject teacher needs to keep records of all the students and enter the information in the personal file accordingly throughout the academic session.
6. The personal file should be made available to parents, relevant stakeholders upon request. The records contained in the file should be used to report on the status of the students learning and personal traits.
7. When a student is transferred to other schools upon completion or if they opt to change school during the academic session, the school should send the personal file officially to the school(s) where the student is being transferred to, or hand over the document to parents, officially sealed, during the issuance of transfer transcripts.
8. A descriptive summary of students learning and competencies in cognitive, affective and psychomotor domains should be reflected in the progress report card.
9. Performance of students are not equated with marks. Based on the quantity and quality of their performance, students are graded either as Beginning, or Meeting, Approaching, or Exceeding are used.
10. New version of the Progress Report shall be used for classes PP to 3 to report performance of students.
11. Schools are to enhance the development of personal, social and national values through the use of diverse rigorous assessment techniques and tools. Therefore, the domain of values should be accorded greater emphasis than the present trend.

Enabling conditions for effective implementation of CFA

The integration of CFA in all the primary curriculum requires assessing and keeping track of students learning continuously throughout the academic session. Every subject teacher needs to assess and keep track of individual student's learning and achievement. Therefore, considering the importance of building strong educational foundation and for effective implementation of CFA to enable every student to meet the curriculum learning standards, objectives and

competencies, it is recommended that one teacher teaches one subject.

In order to ensure that effective implementation of CFA integrated curriculum, schools and teachers require continuous support and monitoring. It is recommended that relevant stakeholders provide the required support to teachers and schools.

Schools need to institute an assessment committee to:

- review the CFA practices quarterly
- perform assessment auditing annually
- facilitate teachers in the implementation of CFA
- review consolidated results and records of students learning
- make recommendations for continuous improvement of the CFA practices.

Provisions must be created to provide professional development avenues and opportunities for teachers on assessment.

Within the available space, effort must be made to minimize the enrolment in classes so as to facilitate the effective implementation of CFA.

INTRODUCTION

Background

The Bhutanese school education system comprises seven years of primary, four years of secondary and two years of higher secondary education. At the primary level, the focus of education is building strong foundation on literacy, numeracy, social studies, general science, values, health and physical education, Information and Communication Technology (ICT) literacy and arts education. The secondary level provides learners with opportunities to study other additional learning subjects such as, geography, history, economics, Sciences (biology, chemistry and physics, environmental science), media studies, agriculture for food security, Rigzhung and Technical and Vocational Education Training (TVET). As learners move to higher secondary level, they have the prospects of specializing in the field of Science, Arts, Commerce and TVET studies.

At all levels of education, various forms of assessment and evaluation are used to determine learners' learning and achievement. At the primary level, the assessment and evaluation is more formative than summative to monitor and support learning using appropriate assessment techniques and tools. As learners progress into secondary levels, the assessment of their learning is more summative using standardized school-level tests and high-stakes examinations.

Although the curriculum mandates implementing Continuous Formative Assessment (CFA) at the primary level, in practice the learners are taught more for tests than for acquiring the required competencies. To address this issue, there is a need to replace the summative written examinations for primary level by strengthening CFA practices in schools.

Rationale

According to Kohn (2000), standardized tests cannot measure "initiative, creativity, imagination, conceptual thinking, curiosity, effort, irony, judgment, commitment, nuance, good will, ethical reflection, or a host of other valuable dispositions and attributes" (p. 11). Concurrent to this statement, the current assessment practices in the Bhutanese education system have not been able to adequately support learners' attainment and progress in learning. Therefore, achieving the overall purpose of primary education in equipping learners with the desired competencies has been a challenge. In addition, the current assessment practices have induced pressure on young children as well as parents, thus creating dislikes for schools and learning (Bhutan Council for School Examinations and Assessment [BCSEA], 2016). The CFA as an alternative assessment system will not only address the current gaps and drawbacks, but will also focus on assessing learners' competencies, including values, attitudes and 21st Century skills in primary curricula.

Issues regarding assessment and evaluation, particularly at the primary level have been highlighted in various studies and forums. Studies carried out by Royal Education Council (REC) (2016) and BCSEA (2017, 2019) also pointed out similar gaps and drawbacks of the assessment and evaluation practices in the primary level. Further, the Bhutan Education Blueprint 2014-2024 explicitly recommends the review and strengthening of formative assessment practices in schools (Ministry of Education [MoE], 2014). Cognizant of the issues, the third Curriculum Technical Advisory Board (CTAB) (2019) resolved to strengthen the assessment and evaluation system in the primary level. The 19th National Education Conference (2019) recommended to phase out written examinations in the primary school level from 2020 and institute an effective alternative assessment system to enhance learners' learning outcomes and performance.

In recognition of the critical roles of CFA for learning and helping teachers understand their roles, education prioritizes enhancing teacher capacity by informing them of the concepts, process and protocols related to CFA. Therefore, the CFA framework is to help teachers and relevant stakeholders to:

- understand formative assessment to make distinctions between formative assessments and other forms of assessments.
- use the fundamentals of formative assessment to design appropriate and relevant tools and techniques.
- carry out CFA consistently following a systematic process.
- underscore the interdependence between formative assessment and educational decisions.
- use learning outcomes or goals aligned task (techniques) and tools for formative assessment practices.
- establish a systematic way of using assessment data to improve instructional and schools' effectiveness
- inculcate in learners the sense of responsibility and cultivate the habit of self-learning.

CONTINUOUS FORMATIVE ASSESSMENT (CFA)

Assessment is a coordinated *system* of collections of demonstrated *evidence* that supports *inferences* and *claims* about student *learning* and learners developed and progressing *competencies*, providing useful *feedback* to *guide* individual and collective *learning* and to *support* integrated educational *improvement*. (Bialik, M. *et al*, 2016, pp 4). The common purposes of assessment are “of learning”, “for learning”, and “as learning”. The Continuous Formative Assessment (CFA) emphasises on the latter two, which is understood as the process used to provide immediate feedback during instruction to improve teaching and learning practices. CFA diagnoses learner's needs and identifies gaps in the understanding and application of knowledge, skills and values to make necessary adjustments (Figure1). Effective CFA results in improved student motivation, interest, commitment, independence and ownership of learning. It also enhances accuracy and efficiency in reporting learners' performance to relevant stakeholders, such as parents, and policy makers.

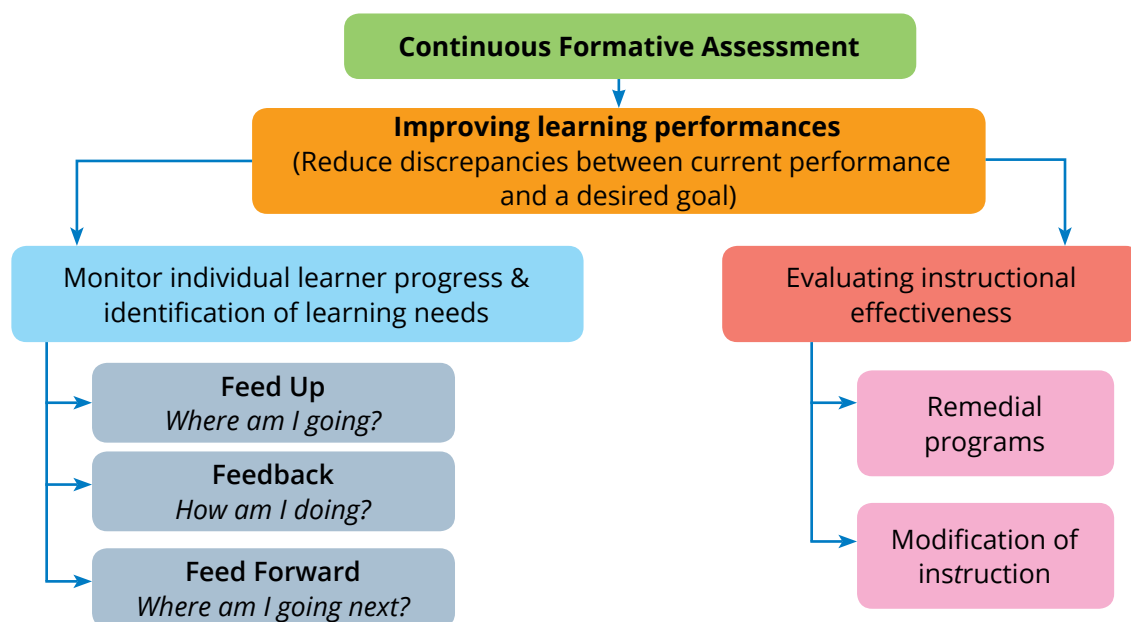


Figure 1: Continuous Formative Assessment System

(Adapted from *Visible learning: A synthesis of over 800 meta-analyses relating to achievement* (p. 176), by J. Hattie, 2009, New York: Routledge. Copyright 2009 by Routledge)

Aims and Objectives

The overall aim of CFA is to effectively monitor teaching and learning process to provide ongoing feedback that can be used by teachers to improve their teaching and by learners to improve their learning.

The objectives of CFA include, but not limited to, the following:

- i. provide descriptive feedback on learner's work and discern where the learner is and what to do next.
- ii. make assessment more authentic and transparent.
- iii. improve the process of teaching and learning.
- iv. assess the efficacy of teaching strategies and curriculum materials.
- v. foster intrinsic motivation to learn and de-emphasize competition.
- vi. strengthen ownership of learning.
- vii. enhance collaborative learning and team work.
- viii. promote self and peer - assessment to enable reflection on self and others' work.
- ix. inform parents/guardian, teachers and stakeholders on student learning.

Continuous Formative Assessment Process

Continuous formative assessment is an active and intentional learning process that partners the teacher and learners to continuously and systematically gather evidence of learning with the aim of improving learner's achievement. Teachers and peers provide descriptive feedback to help learners by addressing the following:

1. Where they are going? (*Desired goal and success criteria*)
2. How are they doing? (*Gathering evidences to gauge current status*)
3. Where are they going next? (*Analysing/interpreting evidences to determine next step*)

Ultimately, learners monitor and reflect on their own learning and take full ownership to improve their achievements.

Formative assessment strategies in the classroom provide both teachers and learners with invaluable information about what learners understand, and what they do not. They also help teachers determine if further instruction is necessary. Therefore, teachers can take the following steps to implement CFA.

Step 1. Establishing purpose/goal

- Step 1.1 Determine purpose and learning outcome for assessment using the subject curriculum framework/ textbook/ teacher guide.
- Step 1.2 Identify appropriate performance task to achieve the identified learning outcome.
- Step 1.3 Determine relevant CFA techniques and tools to gauge the level of individual learner's performance.

Step 2: Teacher modelling including guided instruction

- Step 2.1 Deliver the lesson by modelling how to self-monitor and self-regulate learner's learning.
- Step 2.2 Engage learners in the task through guided instruction.
- Step 2.3 Learners independently perform the task according to the determined criteria.

Step 3: Assessment of learner's performance based on the determined criteria

Step 3.1 Teacher observe and document assessment evidences of learners' performance.

Step 3.2 Peer observe and document assessment evidences of learners' performance (when required).

Step 3.3 Learners self-assess their performance on the task.

Step 3.4 Teacher and learner analyse assessment evidences.

Step 4: Feedback and improvement

Step 4.1 Teacher and learner provide descriptive feedback based on the evidences gathered.

Step 4.2 Learner reflect on the assessment evidences for improvement.

Step 4.3 Teacher modifies instruction and design interventions based on evidences gathered.

Step 4.4 Record the evidences and interventions made.

GUIDING PRINCIPLES OF CFA

The following principles should be kept in mind for the effective planning and implementation of the CFA.

1. CFA is Learner-focused

CFA is purposefully directed towards the learners. It emphasizes on how learners receive, understand and apply information. With CFA, teachers gather information about their learners' progress and learning needs and use this information to make instructional adjustments. CFA also enables learners to accurately and honestly use self-assessments to improve their own learning. Instructional flexibility and learner-focused feedback work together to build confident and motivated learners.

CFA enables teachers to:

- consider each learner's learning needs and styles and adapt instruction accordingly
- track individual learner achievement
- provide appropriately challenging and motivational instructional activities
- design intentional and objective learner self-assessments tools
- offer all learners opportunities for improvement (inclusive).

2. CFA Is Instructionally Informative

During instruction, teachers assess learners' understanding and progress towards standards mastery in order to evaluate the effectiveness of their instructional design. Both teachers and learners, individually and together, review and reflect on assessment outcomes. As teachers gather information from CFA, they adjust their instruction to enhance learning.

CFA enables teachers to:

- align teaching strategies to standards, content, and assessment practices
- ensure the selection of teaching strategies to achieve the desired purpose
- embed assessment in instruction
- make instructional decisions
- gather valuable diagnostic information by generating informative data.

3. CFA is Outcome-based

CFA emphasizes on determining where the learners are in terms of achieving goals. One of the ways is by helping to clarify learning goals and standards for both teachers and learners. Teaching and learning are based on these standards. Learners know the criteria for meeting the standards and are frequently shown exemplars. Teachers give frequent and substantive feedback to learners about their progress, pointing out both strengths and areas that need improvement. Teachers plan steps to move learners closer to learning goals.

Therefore, CFA:

- emphasizes on achieving learning outcomes
- emphasizes the assessment of competencies in performance
- makes goals and standards transparent to learners
- provides clear assessment criteria
- closes the gap between what learners know and the desired outcomes
- provides feedback that is comprehensible, actionable, and relevant for learners.

4. CFA is developmentally appropriate and inclusive

Assessment should be tied to curricular practices that are informed by educational theories and researches, and should support in helping learners achieve the prescribed goals and objectives of the curriculum. Assessment allows learners to demonstrate their ability to function in a variety of cognitively engaging tasks

A wide range of factors should be taken into account when assessing learners' achievement of learning outcomes, including their maturation level, learning styles, learning disabilities, physical disabilities, and other characteristics affecting their performance.

Therefore, the CFA commensurate of the following:

- use different question types or tasks for assessment, introspective of learners' individual differences and capabilities, and deploy diverse techniques and tools to gauge learners' achievement and performance
- teacher identifies individual needs and learning difficulties by using Bloom's Taxonomy principle of six level of abilities in learning and assessment on three cognitive domains
- teacher provides feedback and timely interventions and help each learner to plan for improving learning performance

5. Use of ICT in Assessment

Effective planning and implementation of CFA require the generation and use of data and other useful records. Therefore, ICT should be extensively used. Further, technological advances are driving a significant shift in skills assessment practices. The stampede of a digital zoo of media forms, from games, simulations, and real-time instant communication connecting to virtually anywhere, to the ease of recording video proof of skill proficiencies, textual fluency, and even one's emotive data from body sensors, all captured on portable devices or sent to "the cloud", are all dramatically changing the nature of learning and assessment of ever more complex and subtle skills.

Therefore, CFA is based on the premise:

- multiple assessment methods is integrated with computer aided teaching (CAT)
- ICT resources are deployed in promoting interactive assessment, as opposed to conventional assessment practices
- metacognitive learning is enhanced through ICT resources.

ASSESSMENT TECHNIQUES AND TOOLS

Assessment methods are the strategies, techniques, tools and instruments for collecting information to determine the extent to which learners demonstrate desired learning outcomes. Several methods should be used to assess learners learning outcomes. Therefore, collect information that answers the program's questions; use multiple methods to assess each learner's learning outcome; include both indirect and direct assessment methods; include both qualitative and quantitative methods; and choose methods that allow the assessment of both strengths and weaknesses of learners and instruction strategies.

Assessment techniques refer to the procedures used to arrive at the desired learning outcomes. Some of the commonly used techniques include but not limited to, journal, self-assessment, peer-assessment, interviews, tests, Concept Mapping, Jigsaw, Memory Matrix, Quiz Show 3-2-1 Format, Focused Listening, Muddiest Point, One Minute Paper, Think-Pair Share, and conferencing.

The assessment tools refer to instruments used in collecting and documenting the level of learner's achievement /performance to complete a task. Some of the commonly used tools include, but not limited to, rubrics, checklist, anecdotal records, rating scales, and question and answer (paper pencil).

Assessment Techniques

The following session discusses some of the Assessment Techniques relevant across majority of the school subjects.

A. Journal

A journal or a notebook is a way of keeping track of ideas, questions, observations, and discoveries in an orderly manner that may be used as reference later. Unlike a formal report, however, a journal is a place to collect thoughts in learner's own style. Notes can be added to earlier pages as and when events occur, even include clippings from newspapers or articles.

Why keep Journal?

Writing journal can be of great fun and engaging for learners and can serve a number of purposes:

- providing a record of their thoughts,
- storing notes or observations for later use,
- recording unknowns for later exploration,
- perfecting writing and analytical skills, or
- allowing for deeper contemplation of difficult questions.

Student journals are a specific assessment technique that can positively affect attitudes toward the subject, skill development, and concept mastery. Teacher can use it to examine learners' learning in the affective and cognitive domains. It helps teachers to see into learner's reasoning, rather than simply testing output. Journaling also provides a non-threatening means for learners to communicate their knowledge, feelings and become better thinkers and writers.

Journals can be used to assess learners' learning as well as their perceptions of learning activities and the learning environment. In addition to identifying and correcting gaps in learners' cognitive knowledge, teachers may be able to identify issues in the learning environment that may be interfering with learners' learning.

Type of entries

- **Observation:** An entry describing something learner has seen, heard, or experienced. The style may be fragmented and can include drawings.

- **Reflection:** An entry that records thoughts, questions, or personal opinions on scientific topics.
- **Innovation:** Diagrams or written records of student's own new ideas or inventions. Always include the date on which the idea was recorded!
- **Wonder, Research, and Discover:** An entry that tracks information and the development of learners' thought process as they answer a question or hypothesis that is of interest to them.
- **Laboratory Journal:** Detailed notes on discussions or experiment, usually performed in a laboratory or class setting. Writing style should be formal, work should be shown, and details should be meticulous.

General guidelines on journaling

- **Attention to detail:** Many scientific discoveries have hinged upon noticing a subtle attribute or relationship that others may not have observed. Learners must be specific in their observations.
- **Date everything:** It is important to know exactly when an observation was made, and sometimes, right down to time of the day.
- **Cite where information comes from:** The location of an observation, or a useful website, reference should be clearly cited to refer in the later dates.
- **Use own words:** Learners record observed information in their words, or rephrase the information from other sources to make sure they understand information well.

B. Project Work

Project work is a learning experience in which learners synthesise knowledge obtained from various learning areas, process them to generate new ideas and information, and critically and collaboratively apply in real life situations. The project work provides learners with opportunities to acquire abilities to make connections among knowledge, evaluate ideas and apply them and promotes independent learning. It includes diverse activities that involve research, survey, modelling, videography, site visits, interviews, report writing, experimentation, etc.

Project work is characterized by the following:

- Project work is learner centered and driven by clearly defined aims and the end-product.
- Facilitates learners to explore and extend subject knowledge and skills beyond the classroom.
- It harnesses mix ability of learners and provides opportunity to learn something new, contribute to the existing body of knowledge and create new knowledge through the deployment of scientific techniques and skills, including data collection, analysis, experimentation, interpretation, evaluation and drawing conclusion.
- Project work involves team work, provides solution to problems in specific context and time.
- Learners learn to organize, plan and piece together several separate ideas and information into a coherent whole.

General steps to carry out project work

1. Select area of study

Select an area of study that regularly captures the attention and needs to know more about it. They may include an interesting phenomenon in nature that triggers deeper thinking and heightens the curiosity, or phenomenon, event and observations that makes learners

wonder why? An issue or problem in the community that needs solutions, or a hobby that enhances the academic learning.

2. Select a project topic

After finalizing the area of interest, brainstorm and write as many topics. List the topics in order of priority and interest. Do some reading to learn the fundamentals of the subject matter and note facts and information that are useful.

The best way to choose a topic is to start off with a broad topic and then narrow it down. A topic that is too narrow will not provide with enough opportunities and resources to carry out the project works.

3. Write a problem statement

The problem statement outlines the purpose of the study and the background of the problem. It specifies main problem under investigation. It weaves the relevant data, trends, findings and the need for the study together that would justify sufficiently for the research to be carried out. The problem statement should be as precise as possible as it determines the process of the study. The basic question your problem statement must answer is "Why is the study worth doing?" The purpose of the study is generally personal, practical or intellectual. This nature determines the research design you are going adopted.

In the problem statement, describe the existing and currents needs that are to be addressed by contextualizing to the aims of research study.

4. Generate research questions

A research questions follows the problem statement that seek answers and solution. One research questions may have many possible answers. Do a few quick searches in current periodicals and journals on your topic to see what has already been done and which of your questions are already answered. This should help narrow the focus of the questions.

The research question inquiries about issues one would like to know more about or a situation that needs to be changed or addressed.

A well-articulated research question provides the readers with critical information about the project by defining the focus of the research, its scope, and personal motivation. It should also direct, to a certain extent, to the type of data needed to collect and which methods to be used.

5. Carry out literature review/ gather background information on the topic

A literature review conveys the knowledge and ideas that have been established on a topic, and their strengths and weaknesses. It encompasses scholarly articles, books, dissertations, conference proceedings and other sources of information relevant to one's particular area of study. It provides a description, summary, and critical evaluation of each work included in the review.

6. Generate conceptual framework/concept map

A conceptual framework is a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied. It shows the series of action the researcher intends carrying out in a research study.

A conceptual framework generally is a diagram, begins with codes, factors and variables which may be categorized into a broad theme. These themes and variables are interconnected giving a big picture of problems and determines the strategies to solve them.

7. **Identify variables**

All research projects are based around variables. A variable is the characteristic or attribute of an individual, group, system, or the environment that is of interest in a research study. Variables can be dependent and independent, straightforward and easy to measure, such as temperature, pressure, or income. Other variables are more complex, such as environmental status, ozone depletion, or attitude toward waste disposal.

8. **Formulate hypothesis**

Hypotheses are single tentative guesses, tentative explanation of the research problem, a possible outcome of the research, or an educated guess about the research outcome. Hypotheses are always in declarative sentence form, can be tested, and they relate, either generally or specifically, variables to variables.

9. **Methodology**

The project work in Bhutan is based on research design. It may include experiment or observation method, including tools and materials for data collection to verify and solve the problem. The methodology is part of the project work plan which also defines the sampling design, measurement and scaling techniques and data collection process.

10. **Analyse the data (table of processed numerical data, or graphs, derived relations, calculations, etc.)**

Once good data is obtained, sometimes it is difficult to draw the conclusion directly from it. Therefore, the data may be represented in the form of graphs and charts to understand the trends, relationships and patterns, or calculations are carried out to draw and understand the desired results. Displaying the data in a chart or graph makes it easy to understand the relationship between the variables that influence the study. Knowing about the type of graphs and charts help decide the best way to illustrate data before making the final graphs and analysis.

- a) **Bar Graphs-** It is appropriate for comparing different variable or types of data in the study. It also may be a good choice if an independent variable is not numerical.
- b) **Line Graphs-** It is appropriate for showing how the dependent variable is affected by changes in the independent variable or to show how data changes over time. It is good choice if dependent and independent variables are numerical
- c) **Pie Charts-** It is good choice if percentages or proportions are to be shown. It is good in representing data with less items and for the information which does not contain details.

In the analysis, answer questions such as what do the data tell? What trends does one sees in the graphs and patterns? What did one find out from the experiment or study? And, does the research reveal something unexpected result? Why one did not expect it?

11. **Draw conclusions**

Conclusions summarize project results in a few sentences and use this summary to support the conclusion. Include key facts from the background research to help explain the results as needed, and state whether the results support or contradict the hypothesis. Summarize and evaluate experimental procedure, making comments about its success and effectiveness.

12. **Write Report**

The project work report contains the following components:

- i. **The title of the project work:** Declares the area and the intension of the study.

- ii. **Acknowledgment:** Shows courtesy to thank the people and organisations for the support received for the project work
- iii. **Table of content:** Lists all material following it as well as any material which precedes
- iv. **Introduction:** Contains the following. (a) brief statement of the problem, research questions (b) importance of the problem, (c) related literature - how others have addressed this or similar problems and the relevant results they obtained
- v. **Background information:** Describes scientific concepts, principles, laws and information on the topic, and objectives of the proposed study; identification and exact definition of the problem and hypothesis
- vi. **Methodology:** Describes methods of data collection, sampling tools used, data collection, procedures, field visits, etc.
- vii. **Data analysis:** Data sorting & processing, findings, results, Interpretation of results, inferences from the results and analysis etc., presented in a logical order with illustrations, photographs, and drawings where appropriate and necessary to support the findings.
- viii. **Conclusion:** Provides a summary, reflection of the findings, learner's experiences and opinions and scope for further study.
- ix. **Bibliography:** Lists the sources of information.
- x. **Appendix:** Contains all relevant data, questionnaire, observation table, sketches, official letters, etc.

C. Scrap Book

Scrapbook is a collection of scientific or social clippings, specimens, study samples, art works, print media, pictures, photographs and others, which are appealing and are of learners' interests. Entries in the scrapbooks manifest the emotional qualities and state of the learner. Therefore, scrapbook provides window view of the learner and serves as the basis of the learner's progress in social, cultural, economic, political and environmental values and attitudes.

Why keep Scrapbooks?

- Scrapbooks encourage learners to see the social, cultural, economic, political and environmental phenomena all around them and realize their significance to their lives.
- Learners learn more effectively through their own powers of observation, rather than from the instruction of scientists, teachers or textbooks.
- Scrapbooks provide opportunities for learners to develop creativity and aesthetic values, and value the social, cultural, economic, political and environmental phenomena as they are.
- Scrapbooks allow a great deal of flexibility in assessment with learners of diverse needs and abilities.

How to keep Scrapbooks?

Learners maintain notebooks as scrapbook from the commencement of the academic year, and discuss the expectations of them and the due dates for submission for verification and assessment. Remind learners that scrapbook entries need to be things that occur outside of the classroom, not activities done during class, with the possible exception of entries on experiments that have significant relevance to their interest and experience.

Entries in the form of clippings from newspaper, magazines, comics, newsletters, fliers, pamphlets, and even including download from internet, can be of things that are of learners' interest or those which have emotional significance to their lives. Specimens may include dry leaves, cereals, pulses, dyes, bird feathers, grains, exoskeleton of insects, dried flower petals, nuts, plant parts, or photo clips on diverse topics etc. with a few statements of the learners' reflection.

Write up on any interesting scientific events and natural patterns like rainbows, clouds, bird nests, leaf patterns, insect home, bird's sounds, stream, animal tracks, animal bones, animals caring their young ones, animal teeth with learners' personal thoughts and reflections can also find place in the scrapbooks.

While making entries, learners are expected to follow the common format provided below:

- » Date and time for each of the entries.
- » Explicit reasons for selecting the particular entry must be written for every entry.
- » In case of inventory study, learners must answer questions like, how the study was conducted,
- » What is the relevancy of the study to their life, how can it benefit the community must be explained and described in detail.
- » The sources of the entries should be mentioned clearly in their entries.

Every entry must contain teacher's comments and feedback.

D. Audio-visual

In the 21st century education, use of ICT is promoted for computer aided teaching (CAT), computer aided learning (CAL), and for assessment of learners learning and performance. Technology can enable the delivery of assessments in a number of different ways, some of which enhance more traditional methods, such as online platforms for objective tests, while others are only made possible by the use of technology, such as the use of blogs and wikis. For instance, audio and video assignments can be used in place of more conventional written assignments or presentations. They also allow for the assessment of specific skills that are not easily captured by other means, such as presentation and interview skills. For example, using a ten minute radio broadcast as an alternative to an essay.

Photographs, videotapes or audio recordings of learning experiences are great forms of documentation and are very useful when assessing student learning. They may include pictures of learners at a block centre during the construction process, a recording of them talking with peers as they use materials at a water table, or a recording of a student reading a story with a friend.

The use of audio-visual has the following advantages:

- Allows for assessment of a wide range of skills.
- Can support alternative means of assessment for learners with special educational needs, e.g. radio broadcasts.
- Engaging alternative to written assignments.

To achieve the greatest benefits from using videos in the course, teachers should think about how it integrates with learning outcomes and assessment activities and communicate the purpose of watching the videos to the learners. Reinforce the knowledge presented in the videos by following up with online or in-class discussions, assignments, or mini quizzes. If learners see that the videos clearly connect to class activities and assessments, they will be more likely to see relevance in engaging with the videos and not see them as "extra work".

Tips for using videos in the class

- **Integrate immediate assessment and feedback.** Have learners complete a practice assessment after viewing the video and provide immediate feedback to ensure understanding of the material. Studies show that including an assessment at the end is more effective than just viewing the materials multiple times.
- **Encourage note taking and reflection.** Encourage learners to take notes while watching the video or answer conceptual questions in between the video to help improve long-term retention of the material.
- **Keep the content focused.** Avoid including interesting facts or anecdotes in the video that are not crucial to the learning experience as they become distractors that can decrease learning by reducing both recall and problem-solving performance.
- **Break up material into clear sections.** When explaining complicated cause-and-effect concepts that are related simultaneously, divide the explanation into segments and have learners view them separately before showing the full explanation. This encourages learners to understand one concept before moving onto the next and allows the learner to control the pace of their learning.
- **Use conversation style.** Use a conversational style in videos (such as “you” and “your”) rather than a formal style (such as “learners should...”). This will help learners to feel more personally connected through the video which helps to reduce the lack of presence when materials are moved online.
- **Emphasize important concepts.** Emphasize essential material by highlighting, using pointers, zooming in, and drawing circles, to focus learners’ attention on important points.
- **Avoid too much visual information.** Try to use graphics and narration to communicate concepts. Avoid adding too much printed text to prevent cognitive overload as it is difficult for the brain to read and listen at the same time.
- **Limit video length.** Try to limit video length for online viewing. Instead of uploading an hour long lecture, break the material into multiple, shorter videos. While 6-8 minutes is often given as a target, it is important to consider the context and purpose of the videos as well as the overall amount of video content learners are expected to watch each week.

E. Concept Map

Assuming that knowledge within a content domain is organized around central concepts; to be knowledgeable in the domain implies a highly integrated conceptual structure among those concepts. This means that as the expertise in a domain grows through learning, training, and/or experience, the elements of knowledge become increasingly interconnected. Concept maps have been used in assessment as it provides a bigger mental schema on the interrelatedness among concepts in a domain.

Formally, a concept map is a graph consisting of nodes and labeled lines. The nodes correspond to important terms (representing concepts) in a domain. The connecting lines denote a directional relationship between a pair of concepts (nodes). The label on the line (explanation) conveys how the two or more concepts are related. The combination of two nodes and a labeled line is called a proposition. A proposition is the basic unit of meaning in a concept map and the smallest unit used to judge the validity of the relationship drawn between two or more concepts (Fig. 2). Concept maps are to represent some important aspects of a student’s declarative knowledge in a content domain (e.g., physics)

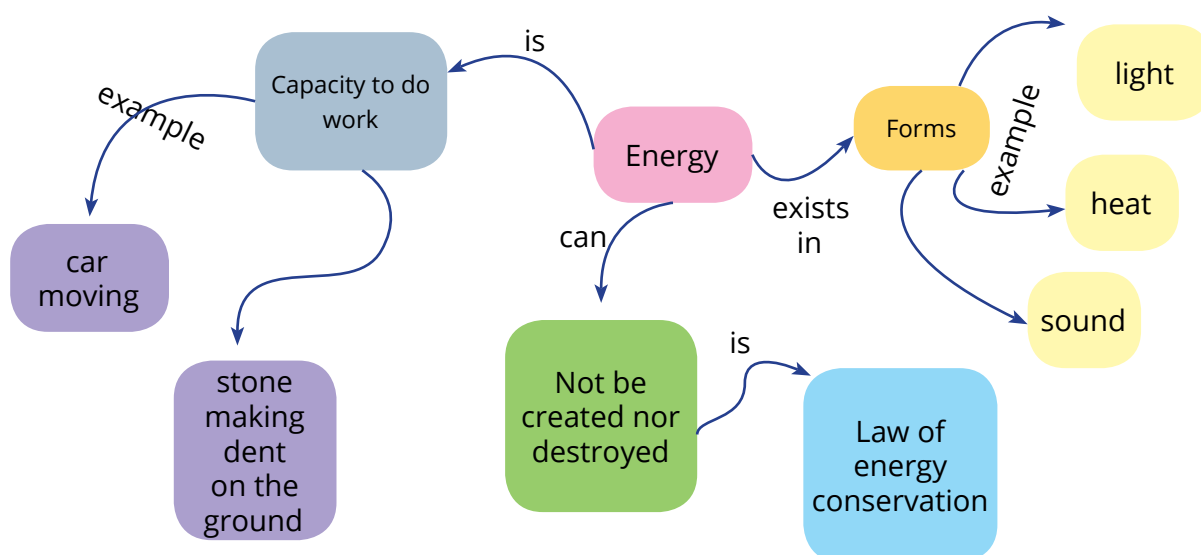


Figure 2: Concept as assessment technique

Therefore, construction of concept maps needs consideration of three points: arrange concepts in hierarchical order – bigger ideas at the top; join concepts with lines with arrow heads – this gives sense of relationship among the concepts, and then provide linking words – describe the relationship among concepts. In the teaching and learning process, concept mapping is generally used as:

1. Diagnostic and summative assessment tool.
2. Self study tool during the content learning.
3. Note taking during the teaching or discussion or in the meeting.

The decisions made about the mapping task and the scoring system are directly related to the map components - what components are provided and with what characteristics, and what is scored. A map completely constructed by the learner may vary on what map components are provided; how much it is provided within each component; the characteristics of what is provided, and what is required from the student. Based on the number of concepts and appropriate linking words and lines with direction, the learner is assessed.

F. Simulations and Game-based Assessment Systems

Simulations and games are already becoming common to measure important skills and competencies in learners. There are promising ways of how digital learning can support formative assessment practices, including wraparound features, such as annotation tools and dashboards, and ways that games can identify more nuanced conclusions about learner learning outcomes.

Games are immersive, fun and challenging, engaging for learners, and provide instant feedback to learners, teachers, and schools about both individual and group performance, compared to norms, on a wide set of social and emotional competencies. Because of their capacity for engagement, it perhaps represents less of an interruption than other kinds of tests, and game play provides learning experiences as it is simultaneously assessing the student.

G. Self-Assessment

Learners know about themselves and about their learning through self-assessment. The statements made about the learning by themselves are an indication of their knowledge and feelings at the end of a learning experience. Teachers provide opportunities and encourage learners to reflect on their learning and identify their strength and weakness. They can either

record in the form of audio, video or printed recordings and work samples. Such evidences help learners themselves and teachers to set goals by reflecting on the work.

Learners should be encouraged to select work samples from their collections to share with others in the class. Through the sharing and reflection, many things can be learned about the learner's engagement in the learning experience and possibilities for future learning.

H. Work Samples and Portfolios

Portfolios show a progression of growth in a child's development during a period of time through a collection of learner work samples. The things children make, do or create are vital pieces of assessment data. Looking at samples of children's work reveal patterns of growth and change over time can be gauged. Portfolios allow teachers and parents/guardians to focus on children's work samples to see what the learner is able to do rather than what he/she is not doing.

Therefore, portfolios mandates that:

- work samples which may include written work, drawings, or documentation of manipulative representations such as a picture of a pattern made with beads, art projects, record of books read by the student, and writing samples are maintained.
- engaging children in the selection process is an important experience for children as they are encouraged to value the presentation of their work while recognizing the growth in their learning.
- dated work samples document individual learner's growth and progress over a period of time is maintained and shared to both parents and learners.

I. Observations in the Classroom

Observations of student interactions and engagements with materials and other learners within the classroom and outside is a valuable means of assessing learners learning and development of personal disposition. Documentation of these observations provides an authentic account of a learner's learning and it shows accountability when planning and communicating each learner's progress. Documentation is an essential element of reflective practice

Therefore, the teacher:

- maintains a record of what is observed while learners are engaged in a learning experience while playing and exploring. Records might include teacher observations which focus on specific skills, concepts, or characteristics outlined in the curriculum.
- records daily observations which may be both planned and spontaneous to ensure that all learning experiences that may emerge from a particular activity are included. Makes children's play and engage in learning experiences visible to teacher, children and parents. It is a way to visibly demonstrate the competence of the learner.

J. Anecdotal Record

Anecdotal notes are short narrative descriptions of observations in the classroom. This allows the teacher to jot down quick notes about the children who are being observed as he/ she moves about the room throughout the day. However, it is impossible to include anecdotal notes for each learner daily but a conscious effort to observe all learners over a period of time is necessary.

The teacher:

- may choose to write her/his comments on sticker or notebook for each child.
- makes notes that are later transferred and organized into a binder or exercise book containing pages for individual learners.

- dates each note so that progress can be tracked over a period of time
- through the review of the notes, makes a pattern on the learner's progress in learning.

K. Conferencing

A planned conversation with individual children or small groups are valuable in providing insight on children's thinking processes. Besides the incidental observations that are carried out as learner work and play, there are times when formal and in-depth observations and conferences are required for gathering specific information. Conferencing with learners provides reliable evidence of their development.

Therefore,

- A periodic conference with learners about the sequence of events in a story which they have read or in playing a game provide valuable information.
- Through conference, the teacher can ask probing questions as learners tell about their discoveries during an activity to gauge their understanding and personal beliefs.
- As the learner and teacher are engaged in these situations, anecdotal notes may be recorded for assessment and evaluation purposes.

L. Test

A test when administered appropriately can be a useful diagnostic and summative assessment technique. Tests can be generally administered in diverse ways including paper and pencil, oral, computer or to demonstrate or perform a set of skills.

Designing tests is crucial in assessing learner's understanding of the subject knowledge, skills and values and the level of competency in applying the learnt content. The following tips should be considered for the entire test process, from planning to reflection:

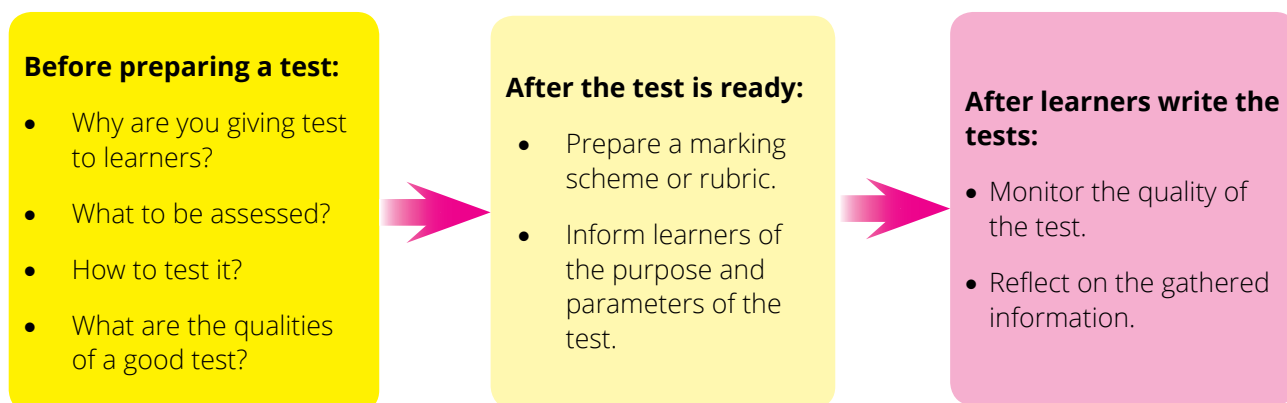


Figure 3: Test design

Reviewing test results can help teachers identify concepts and methods that learners are having difficulty with questions that were missed, as well as concepts and methods that were well understood, and questions generally successfully answered. At the same time, teachers can gauge what is working especially well and what can be improved upon.

The following table summarizes the CFA techniques with suggested tools to measure learners' learning and performance and the weighting for each domain.

Table 1 CFA Techniques and tools matrix

Assessment tools	Learning Domains		
	Cognitive	Psychomotor	Affective
Suggested Techniques	Interview, project work, portfolios, anecdotal, audio-visual, concept map, conferencing, test etc.	Project work, field trip, observation, portfolios, scrapbook, anecdotal, etc.	Journal, scrapbook, self-assessment, observation, game-based assessment, field trip, portfolios, audio-visual, anecdotal, concept map, conferencing, etc.
Suggested Tools	Checklist, rubrics	Rubrics, checklist	Rating scale, rubrics
Approach	Integrated in the subject textbooks and guidebooks	Integrated in the subject textbooks and guidebooks	Integrated in the subject textbooks, guidebooks and as part of co-curricular activities
Weighting	20%	30%	50%

Assessment Tools

Scoring is not always as simple and straightforward as counting the number of words spelled correctly on a spelling test. In performance assessments, learners generate their own responses. Performance assessments frequently result in a product that is created or constructed by the learner. Evidence of learning is demonstrated through such products as posters, essays, projects, models, research papers, reflective writing, and portfolios. The quality and quantity of learner's learning and performance is measured by using appropriate tools. A few examples of commonly used tools are discussed in the following section.

i. Checklists

A Checklist is a listing of specific concepts, skills or behaviour traits, the presence or absence of which the teacher wishes to observe and record. There is usually a box or space on the right of the page near the item for the teacher to tick or check off. For example, in teaching a particular topic, a teacher identifies important concepts that the learners have to learn and makes a list of them to check whether they have mastered or not at the end of teaching the topic.

Such a list is called a checklist because the list is used to find out and record whether something required to be learned has been or not. So, it can be said that a Checklist calls for a "yes or no" judgement and is basically a tool for recording whether a characteristic is present or absent, an action is taken or not, or whether a learning has taken place or not.

Checklists should:

- have criteria as indicators for success based on the lesson outcomes or objectives
- have statements which are short enough to be practical (e.g., one sheet of paper)
- highlight critical tasks
- be written with clear statement, to minimize the risk of misinterpretation
- have space for other information such as the student's name, date, course, examiner, and overall result
- be reviewed by other instructors

Example 1: If learners are assigned to construct a fire-prevention poster, the checklist below might be used

In the poster,

- _____ Words are spelled correctly
- _____ Lettering is evenly spaced
- _____ No extraneous markings are on the poster
- _____ Relevant drawings/figures/graphs illustrate the message
- _____ Colour is used

Example 2: Cognitive assessment on matter

Names of learners	Learning objectives (Criteria)				Score	Teacher's comment / feedback
	Defines matter	Provides 3 examples	Identifies states of matter	Provides examples of each state		
Dawa	✓	X	✓	✓	3	
Yeshi	X	✓	✓	X	2	

The total of number checks indicates the quality of the learner's learning. Based on which, teacher provides feedback to the learner.

ii. Rating Scales

Rating scales as assessment tools offer ways for assessing the performance of tasks, skill levels, procedures, processes, qualities, quantities, or end products, through outputs such as reports, drawings, models, and computer programs. They are similar to checklists except that they indicate the degree of accomplishment, rather than just "yes" or "no". Rating scales contain performance statements in one column and the range of accomplishment in descriptive words, with or without numbers, in other columns as "the scale", such as from poor to excellent, never to always, beginning to exemplary, or strongly disagree to strongly agree. Some tasks, such as procedures and processes, need to be observed in order to be assessed and are judged during the course of teaching, or at a defined time. (BCIT, 2010)

Rating scales should:

- have criteria for success based on expected outcomes
- have clearly defined, detailed statements. For assessing end products, it can sometimes help to have a set of photographs or real samples that show the different levels of achievement. Learners can visually compare their work to the standards provided.
- have statements that are chunked into logical sections or flow sequentially
- include clear wording with numbers when a number scale is used. As an example, when the performance statement describes a behaviour or quality, 1 = poor through to 5 = excellent is better than 1 = lowest through to 5 = highest or simply 1 through 5.

The range of numbers should be the same for all rows within a section (such as all being from 1 to 5). The range of numbers should always increase or always decrease. For example, if the last number is the highest achievement in one section, the last number should be the highest achievement in the other sections.

- have specific, clearly distinguishable terms. Using good then excellent is better than good then very good because it is hard to distinguish between good and very good. Some terms, such as often or sometimes, are less clear than numbers, such as 80% of the time.
- be short enough to be practical

- highlight critical tasks or skills
- sometimes they have a column or space for providing observation and feedback
- have space for other information such as the student's name, date, course, examiner, and overall result
- be reviewed by other instructors.

Example 1: Written Report Assessment

Expected learning outcome: The student will write a report that recommends one piece of equipment over another based on the pros and cons of each.

Criteria for success: All items must be rated as "Weak" or above.

Report	Unacceptable 0	Weak 1	Average 2	Good 3	Excellent 4	Score	Feedback
Introduction							
Main Body							
Summary							

Example 2: Presentation performance assessment

Expected learning outcome: The student will give a presentation that defends their marketing approach for their assigned product.

Criteria for success: Strongly agree to strongly disagree.

Presentation Skill	Strongly disagree 0	Disagree 1	Slightly disagree 2	Slightly agree 3	Agree 4	Strongly agree 5	Score	Feedback
His/her voice was clearly heard								
His/her tone of voice was varied								
The pace was appropriate								
The language level was appropriate								

In developing the rating scale, use the following guiding tips:

- Review the learning outcome and associated criteria for success.
- Determine the scale to use (words or words with numbers) to represent the levels of success.
- Write a description for the meaning of each point on the scale, as needed.
- List the categories of performance to be assessed, as needed
- Clearly describe each skill.
- Arrange the skills in a logical order, if possible.

- vii. Highlight the critical steps, checkpoints, or indicators of success.
- viii. Write clear instructions for the raterx.
- ix. Review the rating scale for details and clarity.

iii. Rubrics

A rubric is an assessment tool that clearly indicates achievement criteria across all the components of any kind of learner work. It can be used for marking assignments, class participation, or overall grades. It is scoring a performance assessment wherein multiple criteria are being assessed and the quality of performance or product is important. There are two main types of rubrics - holistic and analytic.

Holistic rubrics group several different assessment criteria and categorise them together under grade headings or achievement levels.

Example 1. Sample of Holistic rubrics on Participation

A	B	C	D	Score	Feedback
<ul style="list-style-type: none"> Participates constructively in class, models leadership for others and on teams Demonstrates initiative and improvement without prompting Seeks to understand and acknowledge others' thoughts Exceptional content knowledge readily integrated into new problems or settings Challenges his/her own thoughts and ideas. 	<ul style="list-style-type: none"> Participates constructively in class, works well with others, and is a team player Excellent content knowledge Seeks to understand and acknowledge others' thoughts Open to challenges to thoughts and ideas from others 	<ul style="list-style-type: none"> Average content knowledge Assignments reflect average work Sometimes an active participant in class; works fairly well with others Occasionally accepts and attends to challenges and feedback 	<ul style="list-style-type: none"> Rarely participates constructively in class Low level of content knowledge Inactive participant; works reluctantly with others Sometimes shows a close-minded disposition with regard to feedback and challenge 		

(Adapted from Centre for Teaching Excellence (nd))

On the other hand, analytic rubrics separate different assessment criteria and address them comprehensively. The top axis includes values that can be expressed either numerically or by letter grade, or a scale from Exceptional to Poor. The side axis contains the assessment criteria for each component.

Example 2. Sample of Analytic Rubrics on Journal

Criteria	Marking range				Scores
	4	3	2	1	
Cover design	Cover has title of the book, name of the author and grade, cover is very attractive.	Cover has all the three components but the cover is less attractive.	Cover has only two components and cover is less attractive.	Cover has only one of the components and cover is very simple.	
Format	The work contains date, reasons for the entry, source or place of collection, regular feedback from teacher and has critical reflections.	Missing 1 of the 4 components and reflection are less critical.	Missing 2 of the 4 components and poor reflection.	Missing 3 of the 4 components and reflection is absent.	
Entries (samples /specimens/ photographs/ pictures, scrap works, etc.)	Included 16-20 entries with varieties. All the entries have detailed information.	Included 11-15 entries with few varieties. Few entries do not have detailed information.	Included 6-10 entries with fewer varieties. Most of the entries do not have information.	Included 1-5 entries with one or two varieties. Only one or two entries have information.	
Presentation	Ideas in journal are logically sequenced and neatly written. The scrapbook entries are well organized.	Ideas in journal lack proper sequencing though neatly written. The scrapbook entries are less organized.	Ideas in journal are partially sequenced and no neatness in writing. The scrapbook entries are poorly organized.	Ideas in journal are not in sequence and poorly written. The scrapbook entries are not organized.	
Creativity	Journal entries are unique and grab attention throughout. The written journal has imaginative and new scientific ideas.	Journal entries are generally related to commonly observed phenomenon. The written journal has less imaginative and less new scientific ideas.	Journal entries are mostly re- lated to commonly observed phenomenon. The written journal has poor imaginative and a few new scientific ideas.	Journal entries are not related to scientific phenomenon. The written journal has neither the imaginative nor the scientific ideas.	
Total score					

In constructing a rubric,

- i. decide what criteria or essential elements must be present in the learner's work to ensure that it is high in quality. An exemplary learner's work can be as a reference.
- ii. decide how many levels of achievement to be included on the rubric and how they will relate to definition of grades scheme.
- iii. for each criterion, component, or essential element of quality, describe in detail what the performance at each achievement level looks like.
- iv. leave space for additional, tailored comments or overall impressions and the final grade.

A rubric is probably a good choice if there are multiple aspects of the product or process to be considered, if paper and pencil testing or checklists and rating scales do not provide the breadth of assessment needed. Rubrics are especially appropriate for complex learning tasks, or for those tasks and activities that integrate content from more than one content area.

Writing Assessment Scoring Rubric

The decision about the type of scoring needs to be made is given to learners at the same time they receive the assignment, or presentation and product made by the learner. Scores from 4 to 1 reflect the range of excellence in the papers written in response to the assignment. The following broad categories define the score ranges for the writing assignment and for the range of skills.

Score of 4

A 4 paper is OUTSTANDING. It demonstrates a high degree of proficiency in response to the assignment but may have a few minor errors.

An essay in this category:

- is well organized and coherently developed
- clearly explains or illustrates key ideas
- demonstrates syntactic variety
- clearly displays facility in the use of language
- is generally free from errors in mechanics, usage, and sentence structure.

Score of 3

A 3 paper is COMPETENT. It demonstrates proficiency in response to the assignment. An essay in this category:

- is adequately organized and developed
- explains or illustrates some of the key ideas
- demonstrates adequate facility in the use of language
- may display some errors in mechanics, usage, or sentence structure.

Score of 2

A 2 paper is LIMITED. It demonstrates some degree of proficiency in response to the assignment, but it is clearly flawed.

An essay in this category reveals one or more of the following weaknesses:

- inadequate organization or development
- inadequate explanation or illustration of key ideas
- limited or inappropriate word choice
- a pattern or accumulation of errors in mechanics, usage, or sentence structure

Score of 1

A 1 paper is POOR. It demonstrates limited proficiency in response to the assignment. An essay in this category reveals one or more of the following weaknesses:

- weak organization or very little development
- little or no relevant detail
- serious errors in mechanics, usage, sentence structure, or word choice.

Finally, a variety of assessment strategies and tools are to be used to assess children's learning on an ongoing basis in the context of everyday classroom teaching and learning experiences. Children should be encouraged and prompted to show what they know and what they can do, rather than focusing on what they do not know or cannot do. Therefore, the assessment techniques (task) and tools used should be consistent with the curriculum intent and classroom practices. The assessment protocols should clearly reflect learner progress towards the attainment of curriculum outcomes outlined for the grade. Best assessment practices occur frequently and they are planned to fit throughout the teaching and learning process.

i. Feedback

Feedback is an essential element in the teaching and learning process. The objective of giving feedback is to provide guidance with the help of information in a useful manner, either to support effective behavior, or to guide learners in learning towards successful performance. Feedback is information communicated to the learner that is intended to modify his or her thinking or behaviour for the purpose of improving learning.

The art of giving feedback is learning how to give it constructively so that it has some value for the learner. A constructive feedback is a tool that informs learner of the learning strength and weaknesses and motivates in improving the learning. It helps to build trust and faith with the teacher.

A practical guide to giving construct is "Six ways to make feedback constructive" model, which is described by the Figure 3.

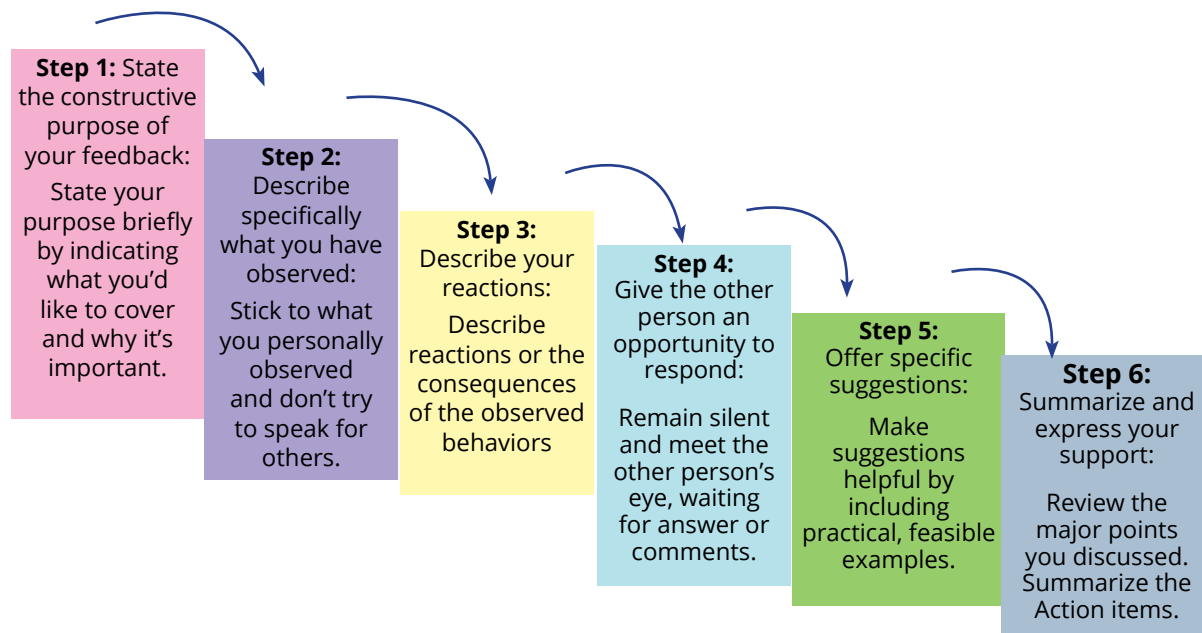


Figure 4: Six ways to make feedback constructive (Adapted from The University of North Carolina, n.d)

At the end of the session, the objective summary can avoid misunderstandings and check that the communication is clear and clean. This summary is an opportunity to show support for the other person, a way to conclude even a negative feedback situation on a positive note.

RECORDING, EVALUATING AND REPORTING STUDENT LEARNING PROGRESS

Recording, evaluating and reporting of student learning is an integral part of the teaching and learning programme from class PP to VI. Each subject teacher uses a range of assessment strategies and relevant assessment tools to track progress of student learning of the required learning outcomes per subject on a quarterly basis. The evidence of learning is appropriately recorded, evaluated and communicated to parents/guardians, and is made readily available on demand to relevant stakeholders.

i. Recording of progress in academic learning (cognitive and psychomotor domain)

The student learning achievement is recorded based on four levels. They are as follows:

- **Exceeding:** The learner demonstrates competencies beyond expectations and targets.
- **Meeting:** The learner demonstrates competencies that meet the expected competencies.
- **Approaching:** The learner demonstrates competencies that are towards the expected competencies.
- **Beginning:** The learner demonstrates competencies that are below the expectations.

The record is used to arrive at the cumulative level per subject per quarter.

Each subject teachers may use the template in **Annexure I** to record the achievement per learning objective. Teachers must also maintain record of student work samples in the form of books, portfolios and other pieces of work. They can use **Annexure I(a)** to make the consolidated record per quarter.

- For each lesson that may target one or more learning objectives, a pre-assessment to identify where the students are in their learning and plan appropriate learning experience, a mid-assessment to understand progress and make adjustments in the instructions, and an end-assessment must be carried out and recorded accordingly.
- For all students, interventions must be continued till they are able to reach the meeting level. Assessment strategies selected to elicit evidence of learning should be inclusive of all types of learners.
- Despite numerous intervention strategies, if a student continues to be in beginning or approaching stage, he or she shall be forwarded to the school counsellor through the school management for other means of support.

ii. Recording of observations in the personal characteristics (affective domain)

All teachers dealing with a particular student (class, subject and house or other groups) keeps record of display of personal characteristics. Based on the guidelines in Annexure II, record of observations in the personal characteristics are kept based on template in Annexure III. The record is cumulated as Outstanding, Very Good, Good and Need Improvement, at the end of each quarter and finally put in the Student Progress Report at the end of the year.

Description of four levels of personal characteristics

Outstanding (4) :	Personal characteristics are beyond expectations and targets
Very Good (3) :	Personal characteristics meet expectations
Good (2) :	Personal characteristics are towards expectations
Need Improvement (1) :	Personal characteristics are below expectations

ii.

iii. **Transferring record of student learning and personal characteristics from teacher level record to progress report card.**

All schools shall use the Student Progress Record Card given in **Annexure IV**. The record of student's academic progress as per **Annexure I(a)**, and record of personal characteristics as per **Annexure III**, maintained by respective teachers is summarised quarterly using template in **Annexure IV** as illustrated by Figure 5. Then transfer to the progress report at the end of the year, as per the formula below.

For academic learning

Assign score for each level as follows:

Exceeding = 4 Approaching = 2

Meeting = 3 Beginning = 1

$$\text{Average Score} = \frac{(\text{Score Q1} + \text{Score Q2} + \text{Score Q3} + \text{Score Q4})}{4}$$

If Average Score $\geq 1 \leq 1.5$ = Beginning,
 $>1.5 \leq 2.5$ = Approaching,
 $>2.5 \leq 3.5$ = Meeting, and
 $>3.5 \leq 4$ = Exceeding

For personal characteristics

Assign score for each level as follows:

Outstanding = 4 Good = 2

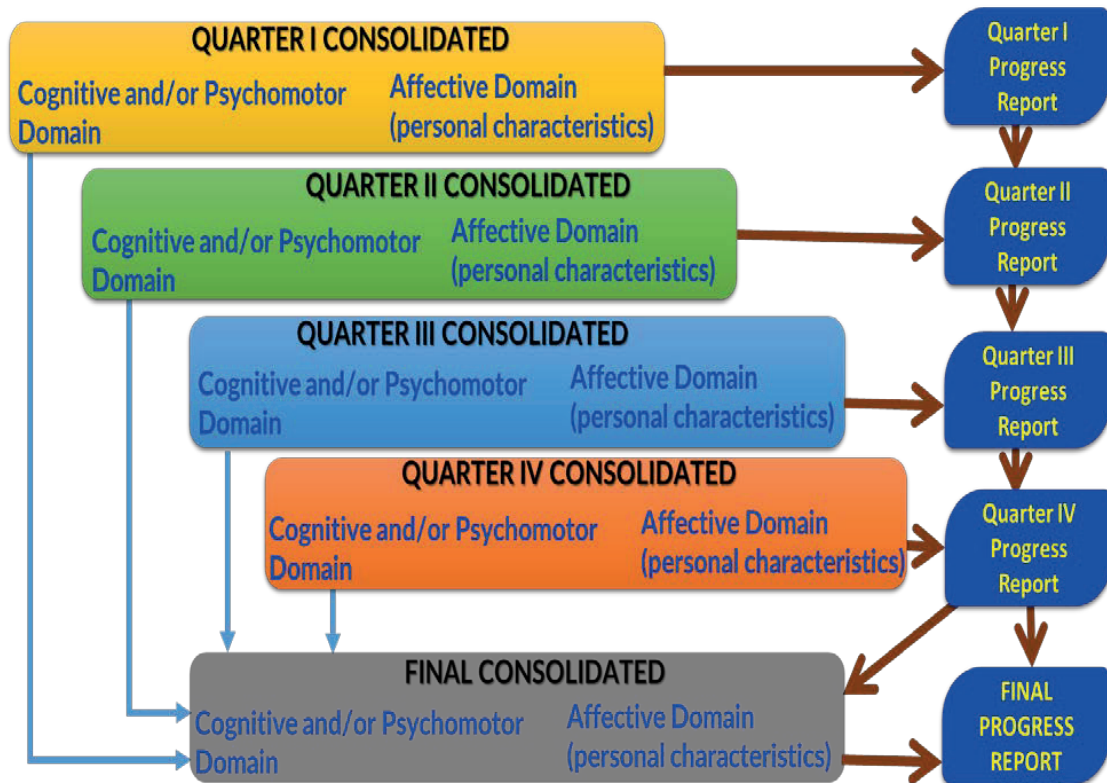
Very Good = 3 Need Improvement = 1

$$\text{Average Score} = \frac{(\text{Score Q1} + \text{Score Q2} + \text{Score Q3} + \text{Score Q4})}{4}$$

If Average Score $\geq 1 \leq 1.5$ = Need Improvement,
 $>1.5 \leq 2.5$ = Good,
 $>2.5 \leq 3.5$ = Very Good, and
 $>3.5 \leq 4$ = Outstanding

Note: Q is referred Quarter

Sequence of recording the three domains



iv. Evaluation

Evaluation is the process of analysing, reflecting and summarizing assessment information and making decisions based on the gathered information. The assessment data shall be used to evaluate the desired competencies with respect to the overall curriculum, and personal characteristics.

Evaluation shall happen at two levels: i. subject teacher level, ii. school level

Subject teacher level: Each subject teacher uses the assessment data to infer problems and challenges of the learners, and accordingly adjust instructions to facilitate improvement in learning. Assessment data about personal characteristics should be used to evaluate learners' performance on co-curricular or extra-curricular activities, and accordingly plan or recommend interventions.

School level: School shall institutes a committee that analyses the data per class level on a quarterly basis to track progress of the learners' learning across class levels in different subjects, as well as personal characteristics to identify issues and challenges and recommend interventions at the school level.

v. Reporting

Reporting is the process used to communicate knowledge gained from assessing learners' learning. The purpose of reporting is to provide relevant information about the progress of learning to learners themselves, parents, school, dzongkhag, and other relevant stakeholders.

Reporting to learners and parents, formally, shall be done on a quarterly basis through a Three-Way-Conference involving the subject/class teacher, learner and parent to discuss the learner's progress and plan for further intervention. Besides academic performance, the reporting also includes the holistic assessment of the learner. Teachers provides a written report to the parents. Informal reporting may be done as desired through, but are not limited to, phone calls, portfolios, exhibits of learner work, notes to parents, parent feedback forms and social media.

Parents may request for a confidential talk with the respective class/subject teacher at any time to discuss about their child's well-being, academic, as well as on learning progress.

Schools shall use the template in **Annexure V** to prepare a quarterly report for each learner.

To institute smooth and efficient implementation of the formative assessment system, it is recommended that a committee be formed with a coordinator appointed at the school level, which is guided by the agreed Terms of Reference developed by the committee..

vi. Pomotion and Retention

The focus of the continuous formative assessment is to ensure learners are progressing on their learning on a continuous basis. Learners progress to the next class based on the following criteria:

- Achieves an overall learning progress level of '**meeting**' in all the subjects. For example:

Subject	Quarter I progress	Quarter II progress	Quarter III progress	Quarter IV progress	Overall progress
Dzongkha	Approaching	Meeting	Meeting	Meeting	Meeting
English	Meeting	Meeting	Meeting	Meeting	Meeting
Mathematics	Exceeding	Approaching	Exceeding	Meeting	Meeting

- Personal characteristics are at a minimum of '**good**' and level.
- Attends a minimum of **90%** of the classes per year.

ASSESSMENT AUDITING

Auditing refers to a systematic and documented process for obtaining evidence to determine whether assessment tasks and related learners' outcomes comply with desired standards. This provides opportunities for continuous improvement, and identification of areas for support, professional development and training. When conducting audits, considerations should be given to assessment protocols, resources, time and the personnel involved.

The formative assessment process has the basis on a set of four inter-related elements that teachers integrate into their daily lessons. These elements are:

- establishing Learning Goals and Success Criteria
- gathering evidence of learner progress toward the goals and success criteria by using appropriate assessment techniques and tools
- analyzing that evidence
- taking immediate pedagogical action based on evidence

Therefore, the process of Assessment Auditing in formative assessment is to consider three key questions that formative assessment answers for teachers and learners alike.

- Where are learners going?
- Where are learners now?
- Where to next?

These three questions guide teachers and learners in the process of formative assessment during teaching and learning. They form the basis for the suggested Assessment Auditing Tool.

Table: Assessment Auditing Tool

Sl No	Assessment questions	Observation	Comment
A	Where are learners going?		
i	Learning goals targeted		
ii	Success criteria are used		
iii	Proportion of total teaching time allocated to assessment		
B	Where are learners now?		
i	Task learners are engaged in		
ii	Assessment tools used		
iii	Appropriateness of assessment techniques / task to the learning outcomes		
iv	Analysis of evidences of assessment		
v	Formative Feedback provided		
vi	Participation of learners in questioning and seeking scaffolding		
vii	Engagement of learner in self and peer assessment		

viii	<i>Learner's views on the quality and usefulness of the assessment</i>		
C	Where to next?		
i	<i>Descriptive feedback that impacts learner's learning</i>		
ii	<i>Adjustments to instruction in real-time either for the whole class, particular groups of learners, or individuals.</i>		
iii	<i>Adaptations made by learners to their learning</i>		
iv	<i>Remedial interventions practiced</i>		
v	<i>Progress in performance of learners</i>		
vi	<i>Professional capacity teachers</i>		
D	What Enabling Conditions are facilitating CFA?		
i	<i>Teaching and learning</i>		
ii	<i>Engagement of other professional</i>		
iii	<i>Support from school administration</i>		
iv	<i>ICT facilities</i>		
v	<i>Monitoring of CFA practices</i>		
E	Strength and weaknesses in assessment		
	<i>Strength</i>	<i>Areas of improvement in assessment</i>	
F	General Comments		
G	Assessment Auditor		
	Name:	Date:	Place:

The assessment auditing addresses the purposes for which the assessment was designed and the purpose for which it is used. It facilitates the examination of the use of assessment data for

improving learner's learning and improve classroom instruction. Eliminates any unnecessary assessments that take time and resources away from instruction. Finally, it supports the dissemination of best practices to improve teaching and learning.

ENABLING CONDITIONS

The successful implementation of CFA will require the collective effort of all and the provision of necessary educational facilities which include, but are not limited to:

i. Learners

Learners should be fully engaged in their own learning. Through self and peer assessment, they review and adjust their own learning. They should be given opportunities to demonstrate what they know and can do through a range of evidence gathered by a variety of assessment techniques and tools. Judgements about their achievements should be based on multiple sources and gathered on multiple occasions. Learners should persevere, show diligence, and practice honesty when engaging in all assessment tasks.

ii. Teachers

Teachers recognize the importance of CFA in learners' learning. They plan and implement CFA strategies as part of the learning and teaching process and provide feedback as appropriate. Teachers should work with colleagues to develop approaches to monitor, to network, and discuss understanding of educational standards and expectations. They use evidence from assessment to communicate and report on learners' achievements and progress.

Teachers capacity to task design carefully is based on a clear understanding of the specific curricular objectives in consideration of how learners develop cognitively strengthens the reliability and validity of assessment. Teacher's use of appropriate assessment methods based on the use of universal design principles ensures integrity and fairness in assessment.

iii. Parents

Parents are encouraged to participate in their children's learning by providing necessary support and encouragement. In doing so, assessment information about their children's strengths, needs, progress, and ambitions, and opportunities for improvement are provided to their children.

iv. Schools

Schools should ensure that they develop their own policy on assessment based on the national assessment framework and directives of the government. Schools ensure that procedures and arrangements are in place to support assessment practices with a view to improve learning and teaching. Ensure that continuous professional development on assessment is identified and provided to teachers. Teachers are made responsible and accountable for CFA implementation in their classes. Therefore, administrative support from education agency officials at all levels, offering targeted assistance to teachers, administrators, and school systems facilitate teachers in effective implementation of formative assessment and improve instructional strategies.

v. Support from Relevant Agencies

The Ministry of Education, through the Dzongkhag Education sector, has the overall management of general education and effective continuous formative assessment in terms of:

- provision of teaching and learning materials
- formulation of policies on management of assessment
- facilitating the use of different modes of teaching, like co-teaching or teacher assistants to support CFA.

- facilitating Professional Development (PD) programs on assessment
- addressing CFA implementation challenges and obstacles.

The Royal Education Council has the overall responsibility for overseeing the implementation of the CFA in regard to:

- ensuring the strategic focus and direction for the implementation of the CFA.
- determining strategic priorities in the implementation of the CFA and guide the development of appropriate assessment techniques and tools and interpretation.
- Advocating the conduct of PD on assessment on learners' performance

The Bhutan Council for School Examinations and Assessment has the overall responsibility for overseeing the high-stake examination and the CFA in terms of:

- Management of high stakes examinations.
- Validating the CFA submitted by schools.

vi. **Professional Capacity for Teachers**

Professional development enables educators to build, use, and score assessments that inform and guide their teaching. Teachers, therefore, need training and support to enable them to make valuable assessment decisions, to provide quality feedback to learners, and to teach learners to receive feedback positively and use the information effectively to improve their work. Assessment for learning and quality feedback can promote increased learner's progress. This is the shift in the paradigm where assessment of learning rather than assessment for learning has preoccupied the minds of the profession for many years.

vii. **Use of technology**

The effective use of technology, including ICT, games, manipulative, to deliver and administer assessments enables simulations, research tasks, and other sophisticated assessment opportunities, and adapt assessments to better measure student abilities and growth. ICT supports both human scoring and machine scoring for reliable and effective assessment. Further, appropriate deployment of means promote reliable scoring systems based on standardization of tasks and well-designed scoring rubrics, moderation of the scoring process to ensure consistency in applying the standards and auditing the system to double check and upgrade comparability.

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ANNEXURES

Annexure I: Template for teacher level recording keeping of personal characteristics (cognitive and psychomotor domain)

Subject:		Quarter:			
Strand:		Sub-strand: (leave blank if there is no sub-strand)		Chapter/Unit :	
Exceeding (4): The student demonstrates competencies beyond expectations and targets Meeting (3): The student demonstrates competencies that meet the expected competencies Approaching (2): The student demonstrates competencies that are towards the expected competencies Beginning (1): The student demonstrates competencies that are below expectations					
Name of the Student	Learning Objective(s)				
	learning level	learning level	learning level	learning level	learning level
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

For students falling in *beginning level*, interventions must be continued till they reach the *meeting level*. Interventions provided shall be recorded. Even if, after numerous interventions on all learning objectives related to a unit, a child still falls in beginning he or she should be referred to counsellor for further support.

Annexure II(a): Template for teacher level recording keeping of personal characteristics (affective domain)

- Outstanding (4) : Personal characteristics are beyond expectations and targets
- Very Good (3) : Personal characteristics meet expectations
- Good (2) : Personal characteristics are towards expectations
- Need Improvement (1) : Personal characteristics are below expectation

[illegible]

Annexure II(b): Guidelines for Assessing Personal Characteristics (To be used to fill the personal characteristics record form)

Personal Qualities	Criteria	Outstanding (4)	Very Good (3)	Good (2)	Satisfactory (1)
1. Leadership Quality	a. Captainship <ul style="list-style-type: none"> School captain House captain Class captain Club captain Committee member Games & sports captains 	Leading more than 3 groups/team 1 exceptional captaincy role with huge positive social impact	Leading 3 groups/teams	Leading 2 groups/teams	Leading 1 groups/teams
	b. Taking initiatives <ul style="list-style-type: none"> Organize programme Organize social work Co-curricular activities Group work Take lead role 	Organises more than programmes 1 exceptional lead role with huge positive social impact	Organises 3 programmes	Organises 2 programmes	Organises 1 programme
2. Punctuality	a. Attending school activities cultural programs, games & sports, morning assembly, evening prayer, studies, classes, SUPW etc.	attends all school activities	attends most school activities	attends about than 50% of school activities	attends less than 50% of school activities
	b. Reporting to school on time <ul style="list-style-type: none"> After any leave taking After break (Mid Term) In class, co-curricular activities, studies, meals. 	always reports to school on time after availing any leave	misses 1-2 times to report to school on time after availing any leave	misses 3-4 times to report to school on time after availing any leave	misses more than 5 times to report to school on time after availing any leave

3. Honesty & Integrity	a. Sincerity at work	completes all assigned tasks with little/no supervision	completes about 90% of assigned task with little supervision	completes about 50% of assigned task with some of supervision	completes little assigned task with lot of supervision
	b. Returning school resources intact (books, equipment, lost and found things etc.)	returns all school resources intact (books, equipment) including all lost and found things	returns 90% of school resources intact (books, equipment) including all lost and found things	returns 2-3 school resources intact (books, equipment) including all lost and found things	returns 1-2 school resources intact (books, equipment) including all lost and found things
4. Willingness to adapt to rules	a. Following the school norms	Follows all schools rules all of the time	Follows 90% schools rules all of the time	Follows about 50% school rules most of the time	follows some schools rules some of the time
5. Social Etiquettes	a. Demonstrates respect for others	stands out as an example to others	always pays heed to others	pays heed to others most of the time	pays very little/ no heed to others (staff, friends, others)
	b. General conduct	stands out as an example to others	always displays good manners with teachers, elders, siblings, juniors, other staff and other community members	mostly displays good manners with teachers, elders, siblings, juniors, other staff and other community members	rarely displays good manners with teachers, elders, siblings, juniors, other staff and other community members
6. Civic Sense	a. Covering and caring books	all teaching learning materials are neat and tidy	most teaching learning materials are neat and tidy	some teaching learning materials are neat and tidy	no or 1-2 teaching learning materials are neat and tidy
	b. Taking care of public property (building, toilets, electric points, water taps, furniture, classrooms etc.)	no instance of causing damage to public property recorded & helps repair damage	no instance of causing damage to public property recorded	1 instance of causing damage to public property recorded	more than 2 instances of causing damage to public property recorded
7. Civic Sense	a. Volunteer for social work	volunteers for 5-6 social service as well as initiates social services	volunteers for 5-6 social service	volunteers for 3-4 social service	volunteers for 1-2 social service
8. Civic Sense	a. Helps to keep campus clean	follows timetable for cleaning and 3-4 volunteer cleaning initiates cleaning	follows timetable for cleaning and 3-4 volunteer cleaning	follows timetable for cleaning and 1-2 volunteer cleaning	only follows timetable to do cleaning

9. General Appearance	a. Hair and nails	hair and nails are always clean and tidy	hair and nails are mostly clean and tidy	hair and nails are generally clean and tidy	hair and nails are generally shabby
	b. Dress up	dress up is always acceptable as per dress code	dress up is mostly acceptable as per dress code	dress up is generally acceptable as per dress code	dress up is generally shabby
10. Creativity	a. Doing things in new / innovative ways	does/organizes more than 4 things based on new/innovative ways	does/organizes 3-4 things based on new/innovative ways	does/organizes 1-2 things based on new/innovative ways	does/organizes things based on common everyday ways
11. Participation in activities	a. Participation in games and sports	represents school at dzongkhag / regional/national level in games and sports	mostly participates in games and sports	sometimes participates in games and sports	rarely participates in games and sports
	b. Participation cultural activities	represents school at dzongkhag / regional/national level in cultural activities	mostly participates in cultural activities	sometimes participates in cultural activities	rarely participates in cultural activities
	c. Participation in literary activities	represents school at dzongkhag / regional/national level in literary activities	mostly participates in literary activities	sometimes participates in literary activities	rarely participates in literary activities
	d. Any other activity	represents school at dzongkhag / regional/national level in extra activities	mostly participates in extra activities	sometimes participates in extra activities	rarely participates in extra activities

Annexure III: Template for consolidated quarterly progress report (cognitive, psychomotor and affective domain)

Roll No	Name of the Student	Subject			Personal Characteristics									
		Dzongkha	English	Maths	1	2	3	4	5	6	7	8	9	10


Name and signature of the Class Teacher

Name and signature of the academic head


Name and signature of the subject teacher(s)

Name and signature of the Principal

Annexure IV: Template for quarterly progress report for individual student

Quarter I Progress Report (February - Mid April)				Year :				
Name :		Admission No. :		Class:	Section:			
School :		Dzongkhag/Thromde:		0				
Personal Characteristics			Academic Progress Report					
Outstanding	Personal characteristics are beyond expectations and targets		Exceeding (འཕུལ་)	The student demonstrates competencies beyond expectations and targets				
Very Good	Personal characteristics meet expectations		Meeting (ཟུག་)	The student demonstrates competencies that meet the expected competencies				
Good	Personal characteristics are towards the expectations		Approaching (ཤིང་པོ་)	The student demonstrates competencies that are towards the expected competencies				
Need Improvement	Personal characteristics are below expectations		Beginning (ཤིན་པོ་ལྔ་)	The student demonstrates competencies that are below expectations				
Sl No	Qualities	Level	ཚོད་ཁལ།	གནས་ཚད།	English	Level	Mathematics	Level
1	Leadership Quality		ཉན་ཆེན།		Listening and Speaking		Number and Operations	
2	Punctuality		ལྷན་འགྲུལ་དང་ཚུལ་ལྡན་ཞུས།		Reading and Literature		Patterns and Algebra	
3	Honesty and Integrity		སྐད་དང་ལྷན་ཞུས།		Language and Grammar		Measurement	
4	Adherence to school rules		བེ་ནི།		Writing		Geometry	
5	Social Etiquettes (Driglam Namzha)						Data Management and Probability	
6	Civic Sense		དཔེ་གསལ་ལས་ལྟ་ཆོས།		Areas of Strength		Areas of Strength	
7	General Appearance							
8	Participation in Cultural							
9	Participation in Games and Sports		ལམ་ངག་གཏང་དགོས།		Areas for Growth		Areas for Growth	
10	Participation in Literary Activities							
Area of Strength			དང་ལྷན་ཞུས་པ་ཆེན།		Recommended Action(s)		Recommended Action(s)	
Area for Growth								
Recommended Action(s)								
			Name and Signature of Subject Teacher		Name and Signature of Subject Teacher		Name and Signature of Subject Teacher	
Attendance	Number of days attended							
	Total Instructional days		Name and Signature of Parent/Guardian		Name of the Principal		Signature of Principal	

Annexure V (a): Student Progress Report Card (Front page)

Personal Characteristics Outstanding : Personal characteristics are beyond expectations and targets Very Good : Personal characteristics meet expectations Good : Personal characteristics are towards the expectations Need Improvement: Personal characteristics are below expectations			 Royal Government of Bhutan Ministry of Education		
STUDENT PROGRESS REPORT Year:					
SI No Qualities Level			Name of the School:		
1	Leadership Quality		Gewog : Dzongkhag:		
2	Punctuality		Name of the Student :		
3	Honesty and Integrity		Class : Section: Adm. No :		
4	Adherence to school rules		Student Code :		
5	Social Etiquettes (Driglam Namzha)		Date of Birth :		
6	Civic Sense		Promoted/Detained:		
7	General Appearance				
8	Participation in Cultural Activities				
9	Participation in Games and Sports				
10	Participation in Literary Activities				
Special Awards/Responsibilities:					
General Comments:					
Signature of the Class Teacher			Name of the Principal		Seal and Signature
Name of the Class Teacher					

Annexure V (b): Student Progress Report Card (Back page)

Exceeding (མཐོང་ལྟོ་)	The student demonstrates competencies beyond expectations and targets				
Meeting (རེ་མཐུན་)	The student demonstrates competencies that meet the expected competencies				
Approaching (ཉེ་འཕྱེར་)	The student demonstrates competencies that are towards the expected competencies				
Beginning (གཞི་འཛུགས་)	The student demonstrates competencies that are below expectations				
STUDENT FINAL PROGRESS REPORT					
ཇོང་ཁ། (Dzongkha)	གནས་ཚུལ།	English	Level	Mathematics	Level
ཉན་སྒྲུབ། (Listening and Speaking)		Listening and Speaking		Number and Operations	
ལྷག་རིག་དང་ཚུལ་རིག། (Reading and Literature)		Reading and Literature		Patterns and Algebra	
སྐད་དང་ཡིག་སྒྲུབ། (Language and Grammar)		Language and Grammar		Measurement	
བྲི་ཞི། (Writing)		Writing		Geometry	
				Data Management and Probability	
དམིགས་བསལ་ཁུད་ཚུལ། (Areas of Strength)		Areas of Strength:		Areas of Strength:	
ཡར་འཕེལ་གཏང་དགོས་པ། (Areas for Growth)		Areas for Growth:		Areas for Growth:	
Name & Signature of Subject Teacher		Name & Signature of Subject Teacher		Name & Signature of Subject Teacher	
Attendance	Number of days attended		Parent/Guardian's Signature		
	Total Instructional days		Name		