



A COMPREHENSIVE TRAINING POLICY FOR TECHNICAL TEACHERS

Module 6: Student Assessment and Evaluation

RATIONALE

Student Assessment and Evaluation is an online SWAYAM course specially designed and developed for the AICTE Technical Teacher Training Module. The main theme this MOOC is that the assessment of learning plays an important role in the instructional process and that its effectiveness depends heavily on the ability of teachers to construct and select tests and assessments procedures that provide valid measures of learning outcomes. This course is structured to provide interactive learning experience to the faculty members and also to develop an understanding of how to assess the students in-terms diagnostic, formative, and summative assessment. The assessment would provide 360-degree feedback of the student in connection to quantitative as well as qualitative performance. The assessment practices must give the clarity between learning versus scoring. Since, assessment gives the feedback to the faculty members about their instructional strategies, it helps to plan and improve the Instructional strategies scientifically. So, this course helps to the faculty member to gather information about the impact of instructional strategies and how well the student learned subject. Further, assessment and evaluation provide pathway to improve the institution as whole.



MODULE OUTCOME

After completing the learning tasks in this module, the learners will be able to:

- ❖ To define the functional role of assessment and evaluation in an educational institution.
- ❖ To explain the complexity of the content and ability need to be developed among the students.
- ❖ To differentiate convergent and divergent questioning in the assessment practices.
- ❖ To differentiate the Direct and Indirect assessment strategies and select appropriate method.
- ❖ To design a Table of Specification (ToS) for the preparation of the question paper.
- ❖ To design a question paper based on the table of specification.
- ❖ To establish the characteristics of the assessment such as validity and reliability.
- ❖ To assess the performance of the student using rubrics.
- ❖ To perform item analysis of the assessment tool.
- ❖ To interpret the assessment score with respect to difficulty index and discrimination index.
- ❖ To integrate different technology tools for class room assessment and summative examinations.

CONTENTS

Unit 1: Introduction to Assessment and Evaluation:

Introduction to Assessment – Languages of Assessment – Different forms of Assessment – Preparative Assessment – Formative Assessment – Diagnostic Assessment - Summative Evaluation – Questioning in formative assessment.

Unit 2: Two-Dimensional Learn – Assess Approach:

Determine the objectives of the assessment – Learning Question – Instruction Question – Assessment Question – Alignment Question - Mapping Two-dimensional approach of preparing the Instructional objectives with complexity of questions – Factual Questions – Conceptual Questions – Procedural knowledge Questions – Meta - Cognitive Questions.

Unit 3: Assessment procedures:

Types of Assessment – Direct Assessment strategies – Indirect Assessment strategies – Maximum performance – Typical performance – Construction of Achievement Test -Types of questions items – Supply type – Selection type – Numerical problem-solving methods – Connect the item type with context.

Unit 4: Design of Question Paper:

Introduction to Table of Specifications (TOS) – Modules vs Levels in the TOS – Scheme of Evaluation in TOS – Factors to be considered for preparing TOS.

Unit 5: Performance Assessment:

Overview of Performance Assessment- Check list – Rating scale - Rubrics – Need for the rubrics – Holistic rubric – Analytic rubric – preparation of Criteria and descriptors for Rubrics – Consolidation of rubric values – B.Tech / M.Tech / PhD thesis Evaluation – Portfolios.

Unit 6: Establish Characteristics of Assessment:

Characteristics of evaluation tool – Validation of the tool - Reliability – Validity vs Reliability – Logical and statistical validity – Usability – Discrimination factors in the Evaluation tool – Interpretation of Test score – Estimate Reliability.

Unit 7: Item Analysis:

Introduction to item Analysis – Difficulty index – Discrimination Index – Distractor analysis - Norm referenced interpretation – Criterion Referenced Interpretation.

Unit 8: Software tools for Assessment:

Technology aid for Assessment - Benefits of using digital tools for assessment - FOSS tools for preparative assessment, formative assessment and Evaluation – Performance assessment tool.

