


ICT and Assessment

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Computer-assisted assessment


- Computer based assessment means the use of digital tools for conducting assessment-related activity.
- Computer based assessment can be done using laptops, tablets, and even smart phones.
- The most common ways of computer-based assessment are the following:



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ICT based Assessment


- There are mainly two major forms of ICT based assessment.
- These are:
 - Computer-Assisted Assessment or Computer-Aided Assessment (CAA);
 - Computer-Based Assessment (CBA);



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Computer-assisted assessment


- Assessment embedded within e-learning modules:
 - This type is most similar to the original computer based training.
 - Here, online assessments are embedded within larger e-learning modules so that students' learning activities could take place on the computer.
 - For example, a student may complete a full e-learning module with a final test at the end.



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Computer-assisted assessment


- It refers to the use of computers to manage or support the assessment process and evaluate assignments.
- CAA is mostly used for scoring multiple-choice questions and questions with short-answer responses using optical mark reader (OMR).
- Computer Based Assessment is generally made through a computer.



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Computer-assisted assessment

- Standalone online assessments:
 - In this, an instructor uses an online assessment creator to develop quizzes and tests, which students take using an online platform.
 - Online or Web-based assessment can also be used to engage students in the teaching-learning process and measure their progress in learning on continuous basis.
 - For example, a teacher after completion of his/her teaching may conduct a short quiz that students take on their smart phones.



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Computer-based assessment

- CBA may be treated as the use of ICT to collect, process, and report the results of assessment.
- The four components of CBA may be categorized as
 - (1) assessment generation,
 - (2) assessment delivery,
 - (3) assessment scoring and interpretation
 - (4) storage, retrieval and transmission.



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Computer-based assessment

- STEM - question or incomplete statement
- OPTIONS - suggested answers or completions
- DISTRACTORS - incorrect responses
- KEY - correct response



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Computer-based assessment

- E-assessment uses ICTs to make the assessment process more efficient by automating functions.
- Objective questions like multiple-choice, fill in the blanks, multiple response, text box and matrix can be developed through online.
- The format of each objective type question is framed as follows:



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Computer-based assessment

- Fill- in- the blank question type
 - A paragraph of text is presented with some words removed.
 - The blanks can be completed either by typing the correct words or by selecting the correct words from a randomized dropdown list.
 - The mode of filling in the blanks is created by the question setter.
 - For example, ----- is the capital of Zambia



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Computer-based assessment

- Multiple-choice question type
 - A question with three or four options is presented where only one option is correct.
 - Options can be text, images or a combination of both.
 - It consists of four parts as given below:



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Computer-based assessment

- Multiple response question type
 - When there are more than one correct options that need to be selected for a question, the Multiple Response question type is used.
 - The scoring method can be selected to give marks for selecting options correctly or to give a mark for the whole question.



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Computer-based assessment

- Text box
 - questions that require answers to be typed into a text box are mainly used.
 - Such questions need to be marked manually.
 - Student responses are presented anonymously to the marker and there is an option for these responses to be marked second time.



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Computer-based assessment

- Flexible provision of feedback - Feedback may be provided both at individual question level for correct and incorrect responses, and overall for the test as a whole.
- Reports - Each question can be scrutinized via an automatically-generated report enabling examiners to check for any errors.
- Re-usable questions - A question bank can be built up and test items can be added and removed.
- Questions and answers can be randomized



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Computer-based assessment

- Quizzes
 - There are various softwares that can be used to assess objective test items in the form of quizzes.
 - Quizzes which are conducted at the end of module (i.e. are 'summative') are referred to as e-examinations;
 - quizzes which are designed to help students check their understanding and identify areas to focus on are referred to as 'formative'.



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Online Based Assessment in Subjective Tests

- Technology has made it possible to conduct subjective tests
- ICT provides a complete score for an essay as well as feedback about usage of grammar, style and organization, and development of essay.



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Computer-based assessment

- Quizzes have a number of potential benefits such as follows:-
 - Inter-scorer reliability(the reliability and internal consistency among two or more individuals) -
 - Quizzes are marked objectively by computer.
 - Speed of marking for quizzes - Results are available immediately without manual staff Marking.



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Online Based Assessment in Subjective Tests

- For assessing student answers to subjective tests, there are various online assessment tools such as
 - questionmark perception,
 - e-rater,
 - calibrand marker and
 - intelligence essay assessor.



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Advantages of using ICT integrated Assessment

- They give pupils rapid feedback.
- Children's confidence is increased by technology-enabled evaluation since they receive rapid feedback on their learning.
- The evaluation may be set up so that children receive quick feedback and can therefore repair their mistakes and go forward.



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Advantages Cont:

- The frequency of assessment could be increased, which would benefit children and keep them engaged in their studies.
- It piques learners' attention and motivates them as they try various technology-assisted assessments.
- Technology-assisted testing/assessment procedures are inexpensive and straightforward to use.



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Questions



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