

IQAC
Christian College Chengannur
Institutional Best Practices

Best Practices 1:

Blooms taxonomy based student testing and assessment

Effectiveness of Bloom's taxonomy based student assessment and feedback based implementation of remedial measures in teaching-learning process

The practice attempts to **analyse the effectiveness** Bloom's taxonomy based methods towards the achievement of **Learning Objectives** by enhancing the processes of **Assessment** (of learning objectives) and **Instructional Activity**.

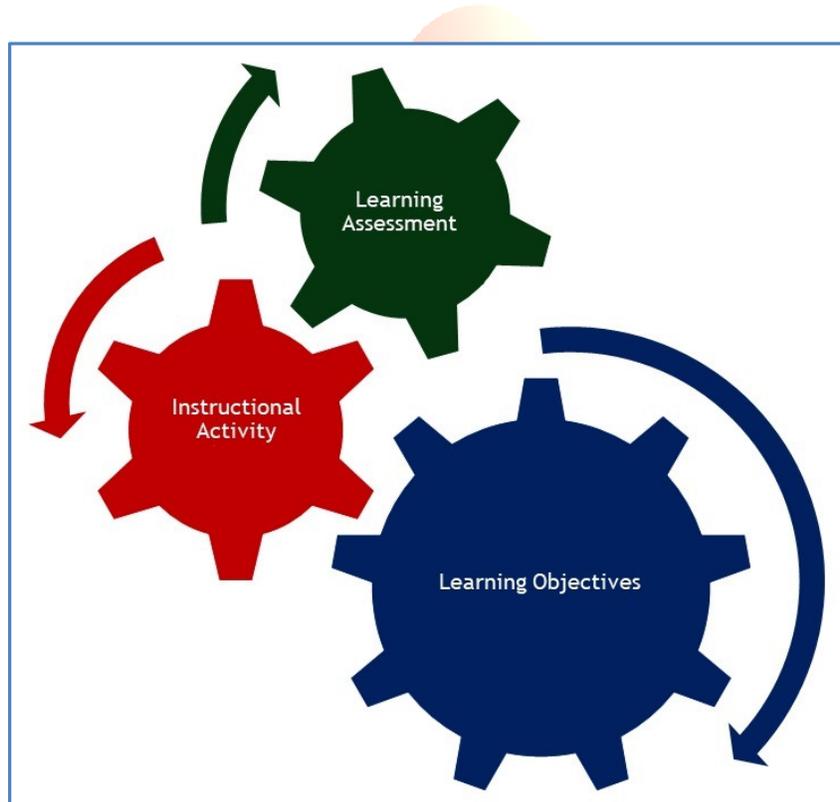
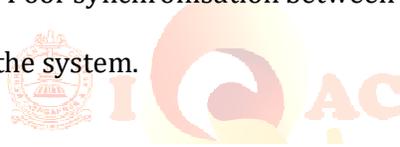


Figure 1.1 The key components of the teaching-learning process are shown in the schematic

Any course that is taught has Learning Objectives. Instruction is imparted to achieve such objectives through various activities. Assessment is done to ensure that the objectives are achieved. The three components shown in Figure 1 are the key to any teaching-learning process. Proper alignment of these three components is essential to success of any of the educational process. Owing to the essentially needed synchronisation between these components, they are often represented by the wheels of a driving system.

Poor alignment between these components often leads to non-achievement of objectives and subsequently to poor results in any educational system. Such non-alignment could be due to inadequacies in the instructional activity component or defective assessment process. Poor synchronisation between the activity and assessment process could further impair the system.



The practice is intended to enhance the dual processes of Instructional Activity and Assessment in an attempt to improve the achievement of Learning Objectives. The effectiveness of such improvement effected shall be analysed. The Bloom's taxonomical classification of learning objectives shall be employed for assessment of learners.

- Effectiveness Bloom's taxonomy based assessment and remedial measures in achievement of learning objectives with specific reference to graduate level teaching
- Tolerance of learners to repetitive need based testing
- Adaptability of innovative instructional methods in time bound teaching-learning systems

Bloom's taxonomical methods in assessment to distinguish between learners in terms of achievement. Assessment shall be followed up with suitable remedial measures so as to ensure achievement of the objectives.

Bloom's taxonomy of learning objectives has been a critical factor influencing the teaching-learning process since its first publication (Bloom, 1956). However, the learning objectives to be achieved were later modified to more tangible formulations (Anderson & Krathwohl, 2001). Yet, the adherence to educational theory in achieving course objectives have been found to be weak at higher educational level as compared to school level (Ferris & Aziz. 2005). The practice addresses this weakness with an intention to quantify the effectiveness of Bloom's method at university level.

Bloom's taxonomy classifies learning outcomes into six categories - remembering, understanding, applying, analysing, evaluating and creating - progressing from lower to higher levels of learner achievement. The progress from any lower to higher stage involves learning (instructional) activity and assessment. Failure to reach the intended level during assessment will require a repeat of the learning activity. The learning outcome expected at each level of achievement is shown in schematic in [Figure 2](#). The learners will acquire the corresponding competencies on achieving of such level.

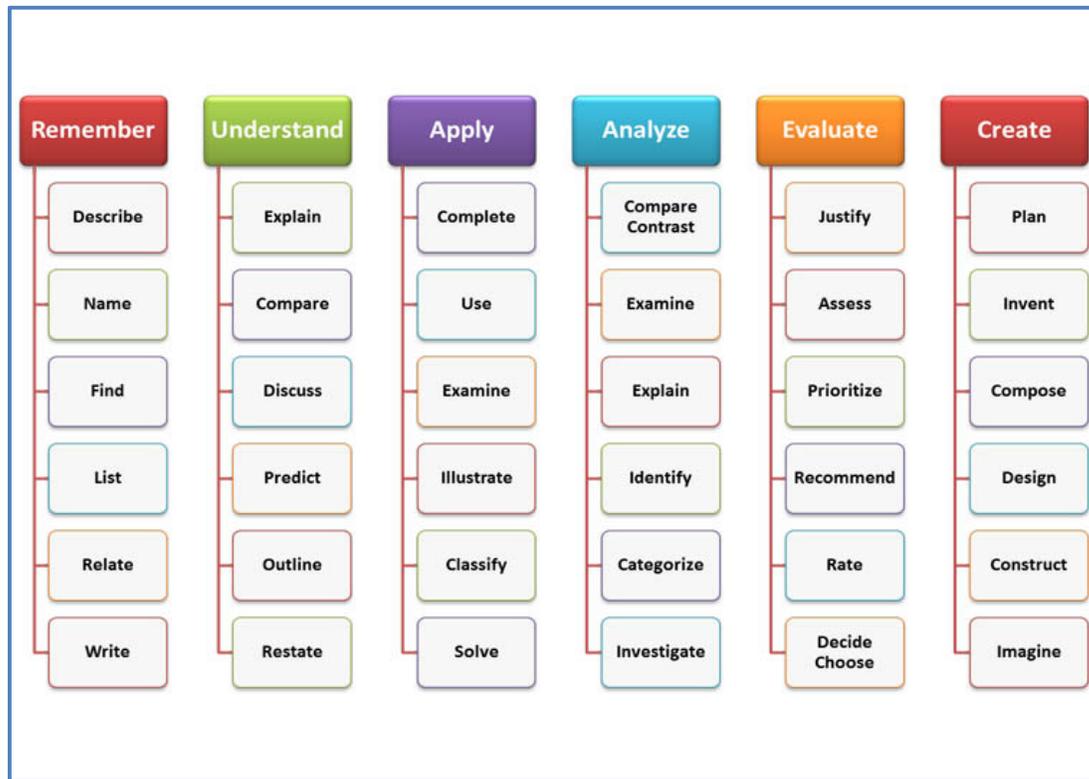


Figure 1.2 Levels of achievement based on Bloom's taxonomy and the corresponding competencies expected of learners at each stage.

Assessment: Assessment of students is to be done using application software and test booklets to categorise the level of learning objective realisation.

Instructional Activity: Based on the level of assessed level of achievement of learners, the students are categorised. Remedial learning activity is provided to learners. Learning Activity Catering to different levels of achievement shall be provided to the students. The institution shall use IT facilities the purpose.

The efficacy of the practice shall be periodically assessed using internal assessment data (as primary data) and End Semester Examination (ESE) (as the secondary data).

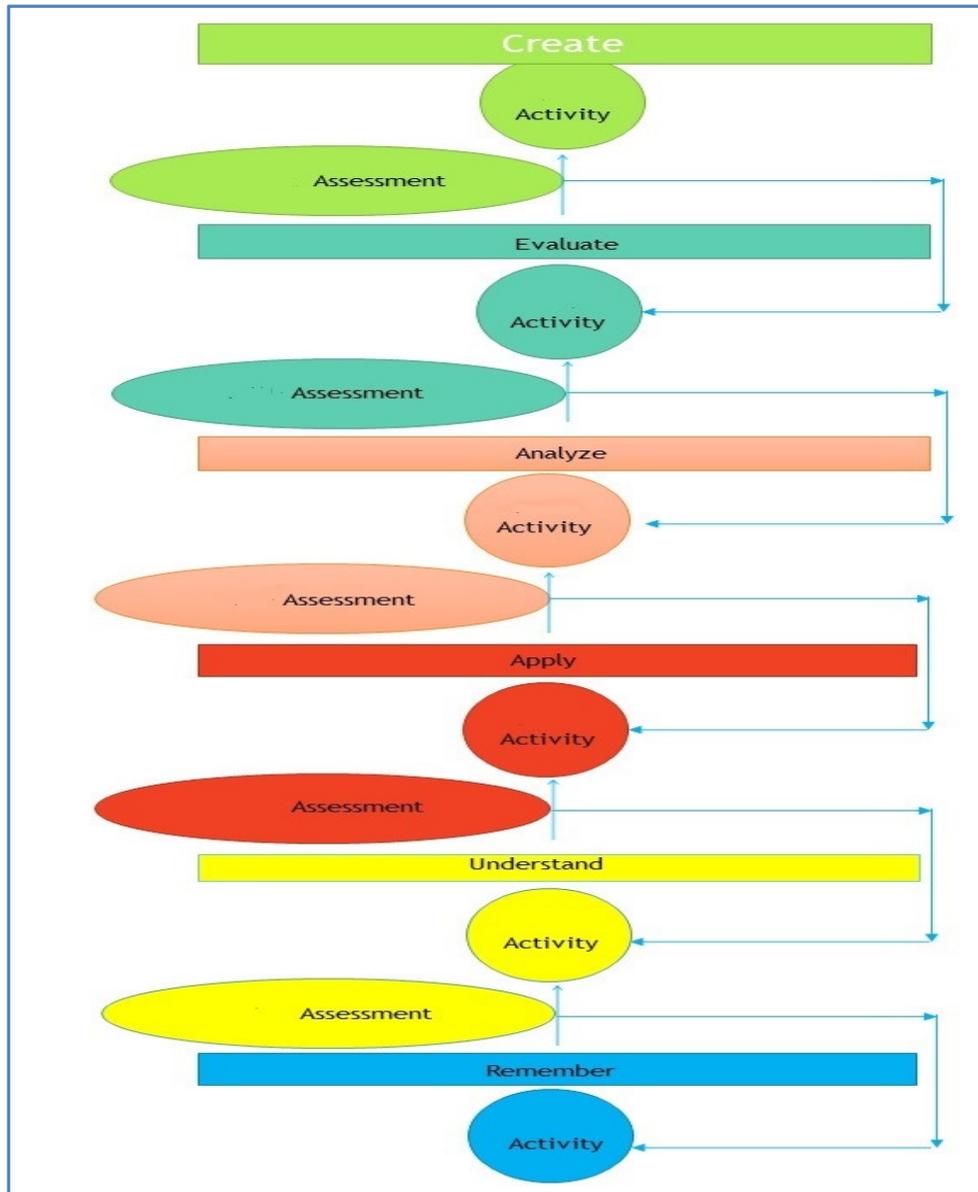


Figure 1.3 Implementation stages of practice

References

Bloom, B. S. (1956). Taxonomy of educational objectives: the classification of educational goals; Handbook I: Cognitive domain. In M. D. Engelhart, E. J. Furst, W. H. Hill, & D. R. Krathwohl (Eds.), *Taxonomy of educational objectives: the classification of educational goals; Handbook I: Cognitive domain*. New York: David McKay.

Anderson, L. W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing: a revision of Bloom's taxonomy of educational objectives. In P. W. Airasian, K. A. Cruikshank, R. E. Mayer, P. R. Pintrich, J. Raths, & M. C. Wittrock (Eds.), *A taxonomy for learning, teaching, and assessing: a revision of Bloom's taxonomy of educational objectives*. New York: Longman.

Ferris, T. L. J. & Aziz, S. M., (2005). A Psychomotor Skills Extension to Bloom's Taxonomy of Education Objectives for Engineering Education, *Proceedings of iNEER Conference for Engineering Education and Research, Tainan, Taiwan*.



Best Practices 2:

Student outcome based learning process efficiency appraisal

In the scenario of highly competitive educational sector, which includes evolving teacher roles and cost cutting measures being adopted by all administrative systems, proper feedback regarding the efficiency of the learning environment is critical to the institution and its stakeholders. Normalised Student Learning Outcome (NSLO) is used to assess the systemic efficiency of the academic environment. Locally specific normalisation is implemented wherever required.

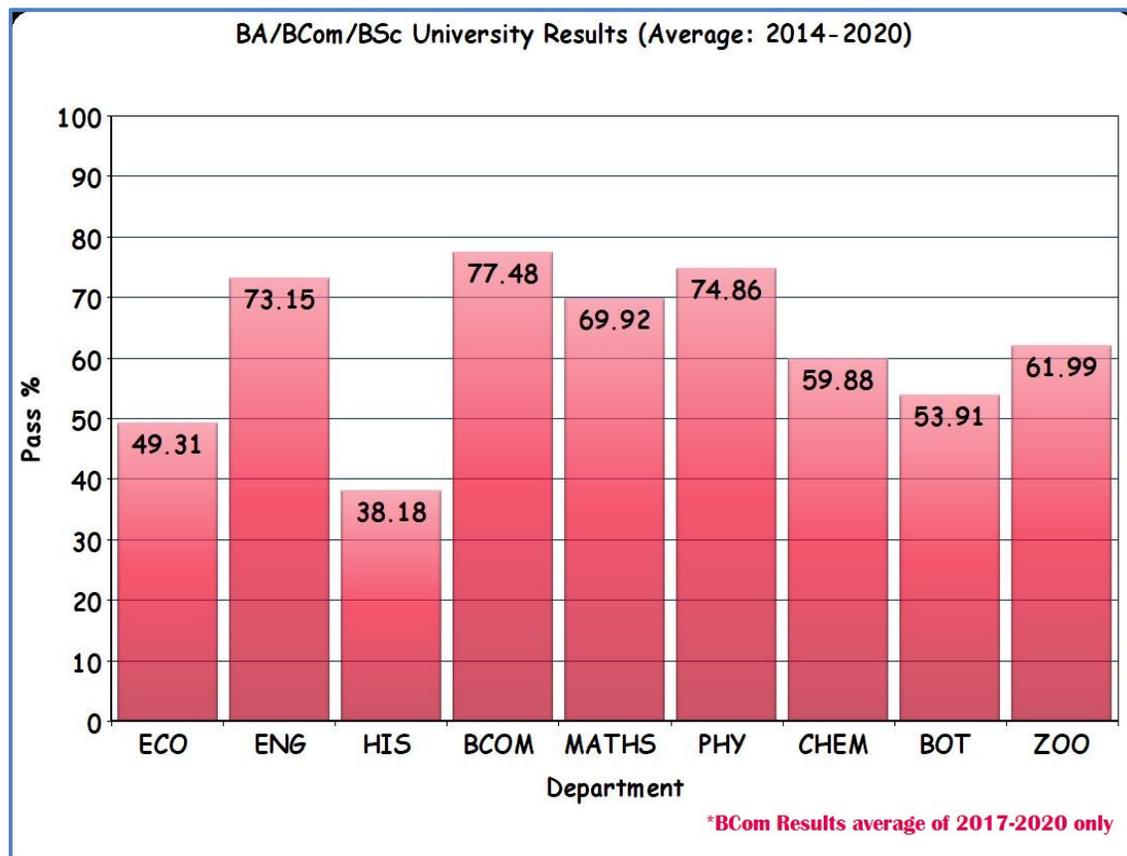


Figure 2.1 Undergraduate Results

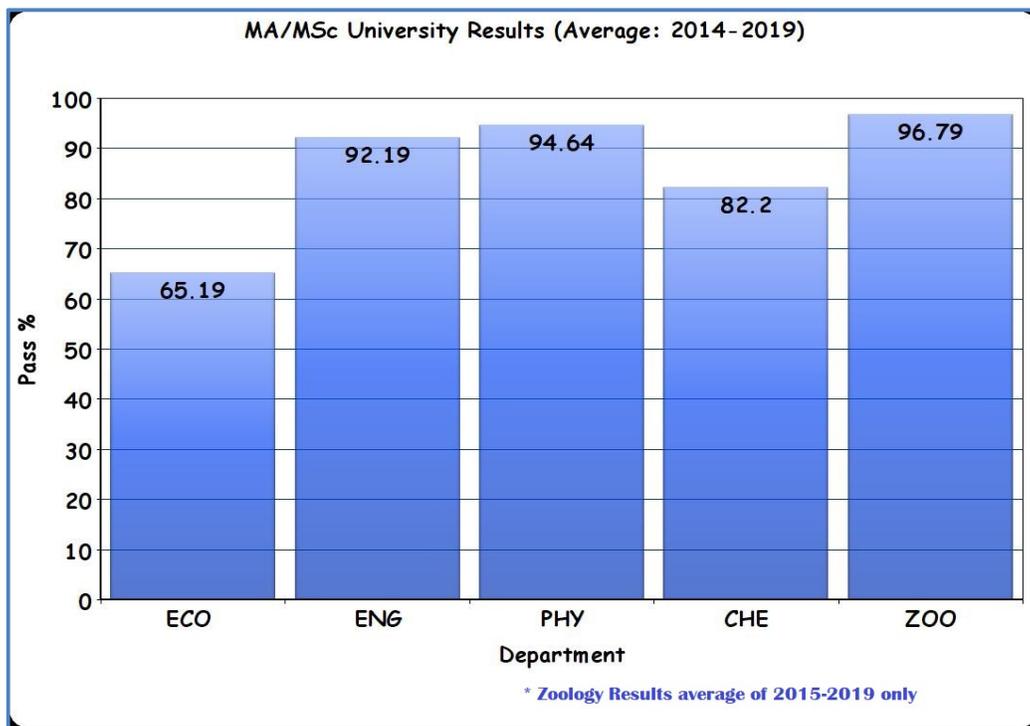


Figure 2.1 Postgraduate Results