



MARIAN COLLEGE  
KUTTIKANAM  
(AUTONOMOUS)

MAKING COMPLETE

# BEST PRACTISE I 2021



## 7.2.1

### Title of the Practice I

This title should capture the keywords that describe the practice.

### **ICT integration and Innovations in Teaching Learning and Assessments**

### 2. Objectives of the Practice

What are the objectives / intended outcomes of this “best practice” and what are the underlying principles or concepts of this practice (in about 100 words)?

- Integrate ICT in Teaching Learning and Evaluation
- Develop 21<sup>st</sup> century educational skills in students and teachers
- Implement student centric - Outcome Based evaluation systems
- Bring transparency and efficiency in the assessment process
- Implement environment friendly green practices in teaching learning process which promotes sustainability
- To provide a supportive learning environment for slow learners and an activity oriented stimulating environment for advanced learners using Learning management systems

### 3. The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

- The College envisaged a teaching learning and evaluation system that support the attainment of Programme Outcome by all Marianites.
- Marian College was always committed to develop global competency among its students.
- The College decided to implement Outcome Based Curriculum and assessments, which requires innovative systems for effective and efficient implementation.
- Marian College was using Moodle LMS as a teaching learning and evaluation tool for continuous assessments from the year 2016 onwards.
- To improve the efficiency and to overcome the locational disadvantageous, the college wanted to develop an automated question paper generation system for the conduct of Semester End Assessments.
- The college wanted to develop a centralized system to keep track of Continuous assessment activities and the attainment of learning outcomes

### 4. The Practice

**Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced (in about 400 words)?**

After moving to autonomous status many ICT Oriented innovations were brought into the teaching learning and assessment methods

Moodle was implemented in the campus and all the courses were offered through Moodle. Continuous assessment activities also were managed through Moodle. Innovative and collaborative assessment activities like Lesson, Wiki, Forum and online Databases are used as teaching learning tools to provide more participative learning experience for the students. Extensive use of Moodle platform has become a sustainable practice to reduce the use of paper in terms of study materials and answer papers.

Turnitin was integrated with Moodle to ensure academic integrity and ethics among students and teachers.

Other Learning applications like Mentimeter, Padlet, and the uReply Learning system of Chinese university of Hong Kong were integrated with Moodle to provide an engaging learning environment for the students

A full-fledged ERP (mcka.in) solution for the institution has been developed inhouse which takes care of all teaching-learning and assessment activities starting from admission to final assessment. Assessment of learning outcomes is also taken care by the new system. The same system automates all functionalities in the office of the Controller of Examinations too.

Automation of question paper generation from question banks was a was a great relief to the college in preparing quality question papers in spite of its locational disadvantage. Quality of questions in the question bank is ensured by external experts. Blooms Taxonomy level as well as the difficulty level are associated with questions in the question bank and the format of proper combination of levels are decided while generating the question paper. The system enabled the college to conduct examinations like Save a Semester for failed students without any problem and even places the College in a safer position to move even into an 'Exam on Demand' pattern. The Save a Semester Examination which is conducted within 45 days of announcement of results is a relief to slow learners.

The location based learning management system (**Name**) ensures the active participation of students in remote field activities, extension works and academic projects .

The College has associations with Hong Kong Baptist University to use their augmented reality based learning systems. The Learning system is used to teach various aspects of Integrity and Ethics using immersive technology.

Under the RUSA funding an AI based invigilation system for online system is under development. This system, once implemented will be able to detect malpractices of students during examinations.

## 5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review/results. What do these results indicate? Describe in about 200 words.

- The college has become resource centre for ICT enabled teaching learning and assessment activities
- Offered consultancy service in Moodle to various colleges and institutes in India

- The questions paper automation system was implemented in the parent university and autonomous colleges in India adopted this system through our consultancy services
- The expertise in Moodle was accepted by Chinese University of Hong Kong (CUHK) and they gave a consultancy project to Marian College worth HK\$ 45,000. The CUHK is ranked 49 in the QS world ranking
- During the COVID pandemic, our teachers and students were able to migrate completely to online platforms seamlessly.
- During COVID pandemic Marian College Kuttikkanam has become a resource centre for teachers through our online MOOC Courses and webinars. More than 25,000 teachers from all over India attended the training programmes offered by our teachers.
- Teachers prepared question banks based on Blooms Taxonomy and varying difficulty levels for the preparation of question papers by the question paper generation software.

## 6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice (in about 150 words).

Arranging training programmes for teachers and students on Innovative teaching-learning applications which replaced the conventional systems, were challenging initially. Five training programmes were given for the entire faculty members in these areas. Three training sessions were arranged at department level for the teachers for Question Bank preparations and the use of outcome assessment software. Experts from IIM Jaipur, Abedkar University New Delhi, Institute for Academic Excellence Hyderabad, Tata Consultancy Services, Wipro etc.. served as resource persons for faculty training programmes.

The College has developed an internal resource team under **MITLE** (Marian Innovations in Teaching, Learning and Evaluations) for training the teachers and non-teaching staff in using Learning Management Systems and Campus ERP

## 7. Notes (Optional)

Please add any other information that may be relevant for adopting/ implementing the Best Practice in other Institutions (in about 150 words)

Any other information regarding Institutional Values and Best Practices which the university would like to include.

The students we teach belong to generation Z and they are born into an era of technology. We need to adopt Technology oriented innovative teaching learning and assessment systems to provide the students an engaging and interesting learning environment. Teaching and assessment strategies have to be designed to ensure learning by students and demonstration of expected outcomes by the students. Marian practice in implementing technology enabled, innovative teaching learning and assessment systems is well accepted



by the students community and our consultancy projects in this area also prove the acceptance of these systems by other prestigious educational institutions. Educational student engagement tools integrated with Moodle can provide an activity oriented interesting learning which meet the learning expectation of present generation students. ICT can be well incorporated to assess the attainment of learning outcomes in OBE framework which is normally considered as a challenging activity by most of the institutions

