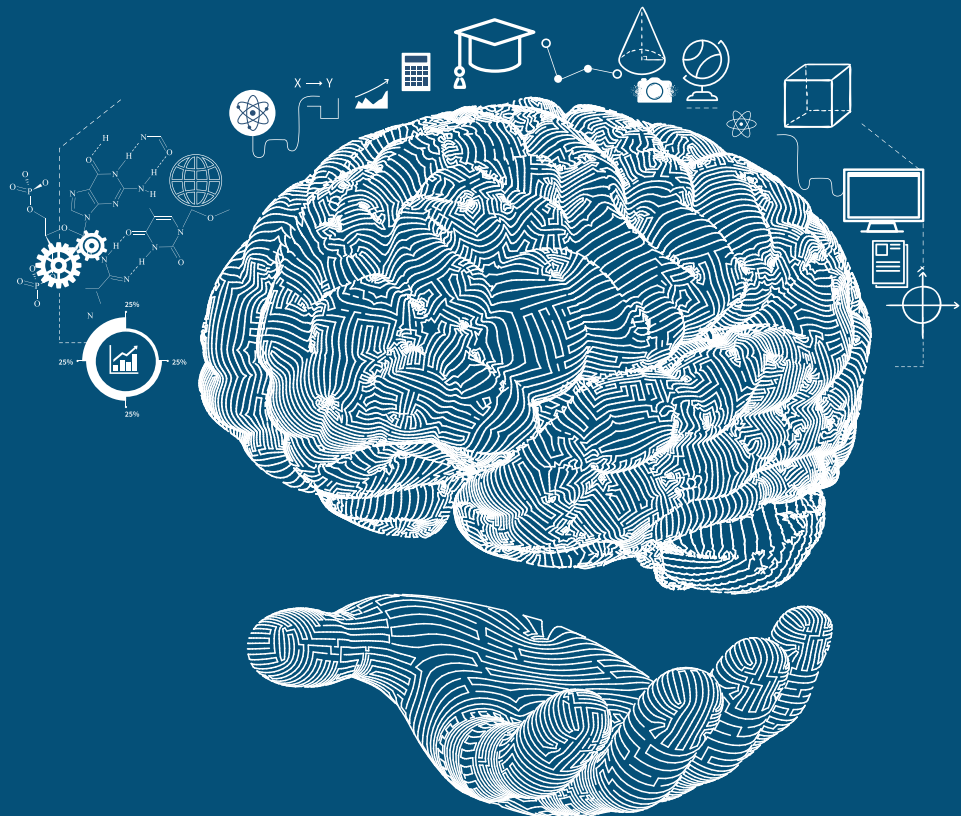


Second Edition

Digital | Audio | Print

OUTCOME BASED EDUCATION

EXPERIMENTS OF A HIGHER EDUCATION INSTITUTION



MARIAN COLLEGE
KUTTIKANAM
(AUTONOMOUS)



MARIAN COLLEGE
KUTTIKANAM
(AUTONOMOUS)

- 1995 - **Establishment** of the college
- 2003 - First **Accreditation** by the NACC
- 2009 - **Reaccredited** with 'A' grade by the NACC
- 2010 - Recognition by the UGC as a **College with Potential for Excellence**
- 2016 - College declared **Autonomous** by the UGC
- 2016 - The **Best NSS Unit** and the **Best NSS Program Officer Award** at the State level
- 2018 - **84th rank** in the college category given by the NIRF

At present, NAAC reaccredited with **3.52 'A' grade**

OUTCOME BASED EDUCATION

EXPERIMENTS OF A HIGHER EDUCATION INSTITUTION

Coordinating Editors:

Dr Binu Thomas

Dr Chackochan J. Njavallil

COORDINATING EDITORS

Dr Binu Thomas
Dr Chackochan J. Njavallil

PUBLISHED BY

Wincos Publications
Third Floor, Joseph Arcade,
Pala, Kerala 686575

PRICE**NO OF COPIES**

1000

PRINTED BY

SR Graphics
Kottayam- 1
Ph.0481 2301142

COVER PAGE DESIGN

Kiran V. Nath
Jelit Mathews Joseph

BOOK DESIGN

Jelit Mathews Joseph
+91 8330830008
www.jelitmathewsjoseph.com

COPYRIGHT

Marian College Kuttikkanam (Autonomous)

FINANCIAL SUPPORT

The Publication of the book is
financially supported by RUSA 2.0

OUTCOME BASED EDUCATION

EXPERIMENTS OF A HIGHER EDUCATION INSTITUTION



ISBN 978-93-90759-17-0



9 789390 759170

FOREWORD

The traditional education system focuses on what is taught, whereas Outcome Based Education (OBE) places emphasis on what is learned. OBE is a pedagogical model that necessitates the restructuring of curriculum, pedagogy and assessment practices to reflect student learning. The focus on learning makes the educational process student-centric. Under OBE, each course will have clearly defined learning objectives which determine what students are expected to accomplish after they complete a programme of study.

The initiatives by the UGC and the accreditation agencies have triggered the growing interest of the academia in OBE. However, there is a paucity of empirical literature on OBE. Very rarely does one come across any serious study or articulation of practical experience in implementing OBE.

This book titled '**OUTCOME BASED EDUCATION: Experiments of a Higher Education Institution**' is the outcome of the successful experience of implementing OBE in Marian College Kuttikkanam. It makes a good effort to collect and collate the rich experiences of the college in designing and implementing a well-structured OBE study programme.

The book is an enduring testimony of the commitment of the college to the cause of education, its unflinching determination to battle all odds during the implementation, and the success that ensued. It will certainly inspire many academicians to make significant efforts to implement OBE.

I congratulate the Principal and the faculty members of the college for their enthusiasm and commitment to translate the idea of OBE into a successful operational practice. This book may help initiate similar processes in other institutions of higher education.



PROFESSOR N.V. VARGHESE

Vice Chancellor

National Institute of Educational Planning and Administration [NIEPA],

New Delhi



Book Presentation - "Outcome Based Education - Experiments of a Higher Education Institution". The first copy of the book is received by His Excellency Shri M. Venkaiah Naidu, the Vice President of India. Dr Binu Thomas, Dr Roy Abraham P., Principal, Dr C.T. Aravinda Kumar, Pro - Vice Chancellor, Mahatma Gandhi, University, Fr Bobby Alex Mannamplackal, College Governing Body Chairman, Dr C.V. Ananda Bose, One Man Expert Committee Member Gol, George kallivayalil, Associate Editor and Deepika Delhi Bureau Chief and the editor Dr Chackochan J. Njavallil were present for the event which was held on 03/01/2022 @ Circuit House, Kochi, Kerala.



सत्यमेव जयते

भारत के उपराष्ट्रपति
VICE-PRESIDENT OF INDIA
MESSAGE

MESSAGE
FROM
VICE
PRESIDENT
OF INDIA



I am happy to know that Marian College Kuttikkanam, Kerala is bringing out a book titled “Outcome Based Education – Experiments of a Higher Education Institution”.

It is commendable that Marian College has been implementing Outcome Based Education (OBE) in its curriculum over the past few years. Therefore, their decision to share the experience gained in this field through this book is truly praiseworthy.

For India’s growth and prosperity, there is an urgent need to reorient our education system according to 21st century needs. We need to move away from the practice of rote learning and adopt new curriculum, pedagogy, and assessment practices for better learning outcomes. In this regard, Outcome Based Education is an innovative approach which lays emphasis on what is ‘learned’ rather than what is ‘taught’.

I compliment Marian College Kuttikkanam for their pioneering work towards the OBE concept. I am sure this new book will inspire many other institutions to make efforts in implementation of Outcome Based Education.

I wish the College all the very best in its future endeavours.


(M. Venkaiah Naidu)

New Delhi
20th October, 2021.

CONTENTS

- 010** A Note about the Book | **Dr Chackochan J. Njavallil**
Associate Professor & Coordinating Editor
- 012** Transformation to Outcome Based Teaching, Learning and Assessment – The Marian Way | **Fr Dr Roy Abraham P.**
Principal, Marian College Kuttikkanam (Autonomous)
- 020** Importance of OBE for Academic Stakeholders | **Prof. Jose James**
Director, LUC Marian Research Centre
- 026** OBE Implementation Experience at Marian College Kuttikkanam | **Dr Binu Thomas**
IQAC Coordinator & Coordinating Editor
- 038** Assessments in Outcome Based Approach: An Insider’s Perspective | **Mr Biju P. Mani, Dr Soosy Joseph**
Controllers of Examinations

Business Administration

- 046** Receptiveness Assessment of OBE: Reference to Beneficiaries of the Department of Business Administration | **Dr Joshy John, Ms Melby Joseph, Fr Dr Sibichan Joseph and Ms Simi John**

Commerce

- 058** An Experience of an Experiment with OBE | **Dr Chackochan J. Njavallil, Ms Neethu Anil**
- 068** OBE in Human Resource Management: An Evolutionary Teaching Experience | **Dr Ajimon George and Dr Shinta Sebastian**

- 072** Redeveloped Learning Process | **Mr Jelit Mathews Joseph**
- 074** A New Vision to a Better Future - Students' Experiences | **Ms Jomol Mathew**
- 076** Next Generation Learning through OBE- Students' Experiences | **Ms Megha Susan Rajesh and Ms Treesa Siby Joseph**
- 082** A Classroom under OBE - Students' Experiences | **Ms Salini Mathew, Ms Simran Raju**
- 086** The Experience of Team Gladiators Regarding OBE - Students' Experiences | **Ms Milcah Elizabeth Shibu**

Computer Application

- 090** Implementation of Outcome Based Learning in Computer Science UG Programme- A Case Study | **Dr Rajimol A., Dr Juby George**
- 098** OBE Diary: Our Experiments from the Known to the Unknown | **Dr Mendes Jacob**
- 102** An Experiment before OBE Implementation | **Dr Brijesh George John**
- 106** How OBE Transformed us into Futuristic Teachers | **Mr Win Mathew John**
- 108** Handling change is the key to happiness | **Mr Robins A. Kattoor**
- 112** OBE- A Slow and Steady Approach | **Mr Satheesh Kumar**
- 118** An Empowering and Participatory Change Process | **Ms Kochumol Abraham**

120 My OBE Experience regarding the course 'Software Engineering' | **Ms Reny Jose**

124 OBE -The future of education is Here | **Sr Italia Joseph Maria**

128 Expand your vistas. Make them believe in themselves | **Mr Krishnaraj S.**

Communicative English

132 Plan, Teach, Track and Review - OBE practices from a Language point of view | **Dr Blessen S. Abraham**

Communication and Media Studies

140 Application of OBE System in the practical courses of the PG programme of Communication and Media Studies | **Fr Sobi Thomas Kannalil**

144 OBE as perceived by MCMS Department | **Dr Michael Puthenthara**

150 OBE in Communication and Media Studies | **Mr Eapen Alexander**

Economics

154 A Tryst with OBE | **Ms Suzanna Oommen**

Hospitality and Tourism Management

158 Corollaries witnessed before the eyes because of OBE | **Dr Fr Shaiju K. S.**

162 My Experiments with OBE of OB | **Mr Arun George**

170 OBE Experiences of first year MMH Students | **Ms Malavika Sunil, Ms Annu Nelson, Ms Shirin, Ms Minnu Maria Jose, Ms Amala Shaji, Mr Anix Luca, Mr Geo Francis, Ms Revathi V. Raveendran, Mr Amal Prasad, Ms Anjana Shaji & Ms Krishna K.B.**

Mathematics

176 Implementation of OBE in Basic Statistics | **Ms Assanu Augustine**

Physics

180 An Approach to introduce OBE in Mechanics | **Dr Midhun H.**

Social Work

184 OBE A Start Over | **Dr Boban Joseph**

188 Outcome oriented Teaching Experiments of Research Methods | **Br Joseph Charuplakkal**

194 Collection of articles on OBE | **Dr Cherian P. Kurian**
Director of MITLE

196 Essential reading on OBE | **Dr Cherian P. Kurian**
Director of MITLE

202 A Word Thanks

A NOTE ABOUT THE BOOK



It was the last day of college which was rather hectic. As I was about to leave the campus, I got a call from the Principal, summoning me to his room. At the Principal's office the IQAC Coordinator was also present. They had certain clearcut 'outcomes' in their mind, and the 'Outcome Based Education - Experiments of a Higher Education Institution' is the outcome of their insistence and persistence.

At Marian College Kuttikkanam Autonomous, OBE had been in the air for quite a long period of time. In the last few years, the faculty had gone through several rounds of orientation and training sessions. We were aware that international agreements, the New Educational Policy, the UGC, the Higher Education Council of the state and the affiliating university had all agreed in principle to implement OBE, and there was no question of going back on it. At the college level, we were taking various steps and efforts towards its implementation.

Though we were only in the process of completing it, we had a sense of

achievement and a great level of satisfaction regarding the distance we had covered and the experiences we had gained. Hence, we thought that it would be worthwhile to share our 'travelogue' with our fellow travellers in the higher education sector, which would serve for the greater good of the students.

What exactly is OBE? How is it going to ultimately benefit and help the student community? How is the teaching learning mechanism going to change due to the implementation of OBE? How are we going to do the assessment under OBE? Can OBE be the solution for the umpteen number of problems facing higher education? Is it going to be more taxing on the already burdened teachers? What would be the response of the students when a different and unfamiliar approach is being implemented in relation to teaching and learning? OBE thus became the buzzword on the campus, and there were more questions than answers.

Adding to our dismay, we found that, though all the policy making

organisations were vociferously advocating OBE, there was widespread ambiguity regarding how exactly it could be implemented in the higher education context. Our teaching learning centre did a remarkable job by way of collecting a plethora of literature related to OBE and sharing it with the teachers. Still many things remained unclear, and we looked around for practical guidance from people who had hands-on experience in OBE. We, however, were not successful. Most of our knowledge came from ‘learning by doing’ and from our experimentations. Through this book, we would like to share with our readers the fruits of our journey of implementing OBE - fruits of a journey of learning.

One question we came across was whether it is advisable to share our ‘trade secrets of OBE implementation’ with others in the academic sphere. The considered opinion of our authorities was that there is no meaning in remaining an island of excellence but to help the entire higher education sector attain greater relevance and effectiveness.

The result is the ‘Outcome Based Education- Experiments of a Higher Education Institution’ in an autonomous, undergraduate and postgraduate education institution in India.

The following are some of the contents of the book:

A brief introduction to OBE, the implementation experiences of the various departments of the college, some sample questions used for assessment under the new method, a few brief responses from the major beneficiaries of education i.e. the students, the Principal’s and the IQAC Coordinator’s recollections of the herculean task of changing the direction of movement of such a big institution, and the Controllers of Examination’s narration of their tryst with the hassles and hurdles of overhauling the entire examination system.

We are confident that this book will generate a lot of interest and enthusiasm in the higher education sector, and hence we have included

a list of books and articles which will facilitate additional reading. As could very well be understood, the cartoons are included not just for fun but to serve as food for thought.

We look forward to your comments and feedback which could be sent to obebook@mariancollege.org. Along with each note included in the book, we have provided the WhatsApp numbers and e-mail ids of the authors. You are welcome to contact them with your queries related to their OBE implementation experiences. The Principal and some of our faculty members are heavily sought-after resource persons regarding OBE. If your institution needs online or even offline training relating to the nuances of OBE, our resource team could be of assistance.

Enjoy and benefit from reading and using the book.

Dr CHACKOCHAN J. NJAVALLIL,
Associate Professor and Coordinating Editor
chackochan.njavallil@mariancollege.org

TRANSFORMATION TO OUTCOME BASED TEACHING, LEARNING AND ASSESSMENT - THE MARIAN WAY



Fr Dr Roy Abraham P.
principal@mariancollege.org
+91 9447033265

Marian in line with its vision always attempts to introduce transformational changes in education – also in the implementation of OBE. The journey started with the formulation Graduate Attributes and learning outcomes in accordance with the students' career needs. The college established MIITL to equip the stakeholders to adopt outcome-based, student-centric education. The college had formidable challenges in implementing OBE but reaped huge rewards after.



There were two small boys, John and Jim, who were friends. Jim had a dog. One day they were taking the dog for a walk and Jim said proudly: "I've taught the dog to whistle". "What do you mean?", said John, "He's not whistling". "I know", said Jim, "But I said I'd taught him; I didn't say he'd learned".

CITATION Gre02 \1 16393
(Green-Armytage, 2002).

In the face of stunning scientific and technological advances and surprising socio-political reforms that lead to amazing cultural reawakening and unprecedented socio-economic challenges, there arises the necessity of a visionary and future-oriented education in our day more than ever before (Raja Roy Singh, 1991). The expansion of knowledge along with the limited human capacity to assimilate them have also put their pressure on the education of the 21st century (Spring, 1999). The developed countries have made transformational changes in education at all levels in the beginning of this century or by the end of the

last century. The changes introduced by them were primarily in favour of 'learning outcomes' than in favour of 'learning inputs'.

OBE in Engineering

In India, the early efforts to specifically define the outcomes of higher education started in the beginning of this century. The need was deeply felt due to the unmatched exodus of engineering graduates from our country to others. Engineers with the same degree from different universities often did not possess similar skill sets as is expected from the international

community. Therefore, to have a level play with the graduates from other countries, India had to define the outcomes of its engineering programmes and become a provisional signatory in the 'Washington Accord' in 2007. India became a permanent member in the Washington Accord on 13 June 2014 (NBA, 2021), and the agreement for the country was signed by the National Board of Accreditation.

OBE in Arts, Science, Commerce and Humanities

The Indian higher education is regulated and directed by the University Grants Commission especially in Arts, Science, Commerce and Humanities. The UGC, with the introduction of choice based credit and semester system in undergraduate education, stated, "The present alarming situation necessitates transformation and/or redesigning of system, not only by introducing innovations but developing learner-centric approach." (UGC, 2014). In 2017, the National Assessment and Accreditation Council thoroughly revised its matrices of assessment and gave significant weight for outcome based curriculum development.

Later, in a National Conference of Vice Chancellors and Directors on Research and Innovation held on 28 July 2018, it was resolved to adopt and implement 'Learning Outcome Based Curriculum Framework' (LOCF) from 2019-'20 academic year (UGC, 2020) in all the universities and autonomous colleges in India. The UGC has also published a comprehensive handbook for implementing LOCF in undergraduate education in India in 2020 (UGC, 2020).

In line with the guidelines of UGC and NAAC, the Higher Education Council of Kerala has also organized several faculty development workshops for the successful implementation of outcome based curriculum development and assessment in the state (KSHEC, 2019). The Mahatma Gandhi University, Kerala, Kottayam, also organised a faculty development programme in early 2020 for framing outcome based curriculum framework (Mahatma Gandhi University, 2020). It is in this background that Marian also has made its efforts towards implementing OBE which is described below.

Developing Graduate Attributes

Marian had her third cycle of accreditation in 2014. The NAAC manual of

that time had matrices on 'Graduate Attributes' (GA) – a concept that was less familiar to the Marian community. Going through the literature, the meaning and implications of GA was unmistakably understood by a team of faculty members of the institution. The next task was to develop GA for Marian. This was a pleasant but difficult and time consuming task. The IQAC team decided to collect feedback from all its stakeholders on why they chose Marian for their studies or career. Hence 3600 feedbacks were collected from students, faculty, management, parents, alumni, employers and neighbours by devising appropriate questionnaires for the different groups. The volume of responses was encouraging but challenging for compilation.

The next phase was compilation and consolidation of the responses which was quite time consuming. This was done by a team without losing the response of even one person. The team made several presentations before different stakeholder groups and finalised nine graduate attributes with the detailed characteristics of each attribute. The nine attributes revolved around the four pillars of education- learning to know, learning to do, learning to live together and

learning to be - as stated in the report published by UNESCO (Delors, 2021).

Developing Learning Outcomes

In 2016 when the college became autonomous, it started focused efforts towards developing a curriculum that was outcome based against the backdrop of policies announced internationally which was subsequently supported by the UGC, the NAAC, the Kerala Higher Education Council and the Mahatma Gandhi University. The college had submitted its application for autonomous status to the UGC in 2014.

However, the expert visit took place almost a year later. The delay in processing the application actually became a blessing for the college since it gave fruitful time to prepare for taking up the responsibilities of an autonomous college. The faculty and the administrative staff visited well known autonomous colleges in South India in small groups. These visits were a great learning for all. Based on the requirements identified after the visits, intensive training was imparted to the management team, the faculty and the administrative staff during 2015 - 2016.

Since the graduate attributes had been finalised in 2014, formalisation of the POs was a comparatively easy task. The task was entrusted to a task force which prepared the draft with representative consultation from all stakeholders and presented the first draft of the POs before the Apex Body of the college, and inputs were taken. The next round of presentation was before the Directors/HoDs of all the departments. With their feedback, the final draft was presented before the Management Board for their suggestions and approval. The POs were finalised in 2016.

Preparation of Programme Specific Outcomes (PSOs)

The faculty of all the departments were enthusiastic in developing the PSOs for the programs offered by their department. They were given expert training for the preparation – both external and internal expertise were utilised in training the faculty. Several models from world renowned universities were made available to help them develop the PSOs. A few senior faculty members were selected to provide individualised guidance for specific departments as a mentor colleague. The faculty from the department would formulate the draft

and present it before the mentor colleague from another department. This process was found very helpful since a senior faculty who was assigned as mentor from an unrelated department naturally had a lot of questions and suggestions. The departments made their sincere efforts under the leadership of the HoDs and finalised the PSOs for all the programmes in 2017.

Development of Course Outcomes (COs)

The faculty in charge of a course is given the responsibility of developing the COs for that course. After developing the COs, they have to present it before the Department Faculty Council (DFC), and the Council assesses them and see how these COs contribute to the POs and PSOs. A lot of fine tuning takes place in the DFC before the COs are approved and made part of the syllabus.

Marian Institute for Innovations in Teaching-Learning and Evaluation (MIITL)

MIITL was established with the purpose of equipping the teachers to take up their changing role from the “sage on the stage” to the “guide on the side”, to become coaches of un-

The nine graduate attributes developed by Marian on its journey towards the implementation of OBE revolved around the four pillars of education - learning to know, learning to do, learning to live together and learning to be. MIITLE equipped the faculty to take up their changing role from the “sage on the stage” to the “guide on the side”. Marian’s transition from the traditional method of teaching to OBE shall contribute to the revolutionary result of ‘full flowering of life in abundance’ for all Marianites.

derstanding, and not mere providers of content knowledge, skill or activity. For championing this paradigm shift and training the stakeholders for adopting an outcome based, student-centric education, the college, in 2018, established the Marian Institute for Innovations in Teaching - Learning and Evaluation (MIITLE), an Institute within the campus with the funding support from RUSA. Dr Cherian P. Kurien, a social scientist and researcher who was appointed as the Director of the Institute, spearheaded many of the initiatives towards the OBE implementation. He was there to provide resources whenever necessary, to mentor the faculty individually and give necessary training. MIITLE has been a stable support and a one stop solution to all challenges in implementing OBE in Marian.

Mapping of outcomes

The IQAC of the college has played a key role in the implementation of OBE in Marian. Mapping of POs, PSOs and COs were done with the direct support of the IQAC. The IQAC has done extensive training on mapping, and has helped the departments to map the outcomes.

Issues in implementation

Transformation to outcome based curriculum framework is not always a smooth ride. There are many challenges that affect the effectiveness of its successful implementation.

Some of the challenges are given below:

- **Large numbers in a class:** When the student numbers are as high as 40 to 60, the challenge is big. It is very difficult for a faculty to attend to everyone and give feedback on the performance of the students
- **Online class due to COVID-19:** In 2020-'21, we have also gone for direct assessment of COs through different tools. This was quite herculean for every teacher.

Many teachers found it quite frustrating because they were going to implement a system of assessment over a group of students whom they had never met face to face. Therefore, many teachers had the fear whether the new system of assessment would be properly understood by the cohort.

- **Assessment:** The tools and the development of rubrics for assessment were very puzzling. The curriculum delivery was based on the outcomes developed. How to measure the attainment of outcomes through the traditional methods of examinations and tests? A ‘buddy’ system was implemented to help every teacher in this regard.

- **Being irregular in studies:** Students generally do not have the habit of regular study. The OBE, however, required regular monitoring and feedback. Students, due to the online mode, had difficulties in regularly updating their learning.

- **Over dependence on ‘Google search’:** When the teachers give the students any challenging assignments, a large number of the latter search Google for answers rather than trying to figure them out for themselves.

This over dependence on technology hinders their learning on many occasions.

- **Clarity of Outcomes:** Though outcomes are set at different levels,

they need to be sharpened. The college has made it mandatory to relook at the outcome statements every year and revise them whenever necessary.

- **Lack of industry experience:** Lack of industry experience of the faculty is another challenge in framing appropriate outcomes.

This is largely resolved through alumni involvement in curriculum development.

Rewards of OBE implementation

- **Clarity for the faculty:** One of the senior teachers came to me by the end of the semester and told me, “Only now I understood, why did I teach some of the portions for the past 26 years”. Teachers have to define the COs and map them to the POs and PSOs which necessitates a fair understanding by every teacher as to ‘why they teach’ a topic.

- **Clarity for the learners:** The learners are quite sure why they attend a session. All sessions are outcome based. After the completion of a course or a programme, every student is able to state

with confidence what the demonstrable skills are that they have achieved.

- **Complete control over the curriculum:** Outcome based learning framework gives complete freedom and responsibility to design the curriculum, including the assessment. This has raised the enthusiasm level of the faculty. They feel the ownership of the course and work harder to make it more enriched and valuable for their students.

- **Achieve demonstrable skills:** The implementation of OBE was well taken by the majority of students. When they attend a course or a unit they are very sure what to expect from the session. All sessions become outcome oriented and students are also happy because they get regular feedback from faculty and peers about their performance.

- **Placements:** Outcomes were devised with necessary inputs from the corporates. The academics also focused on demonstrable skills rather than encouraging rote learning. Therefore, the students will be able to success-

fully come out of a Programme with enhanced skill sets than the traditional method of teaching. This will boost the placements of students.

Feels proud to be a Marianite

The transition from the traditional method of “teaching and testing” to implementing outcome based learning curriculum framework, was the most exciting journey in the academic career of the college. From comprehending the idea to executing it commendably, was the real celebration of the strong thread of relationship that existed in the institution.

The feeling of togetherness kept us strong and going amidst tiring and sometimes quite sceptical situations. The strong relationship among us which we often proudly state as ‘Marian family,’ gave us enough space for openly expressing the doubts or disagreements of everyone, and hence, the decisions were clarified or revised on general consensus.

The Marian academic fraternity, therefore, passionately expects that the fruits of their hard work will certainly contribute to the revolutionary result of ‘full flowering of life in abun-

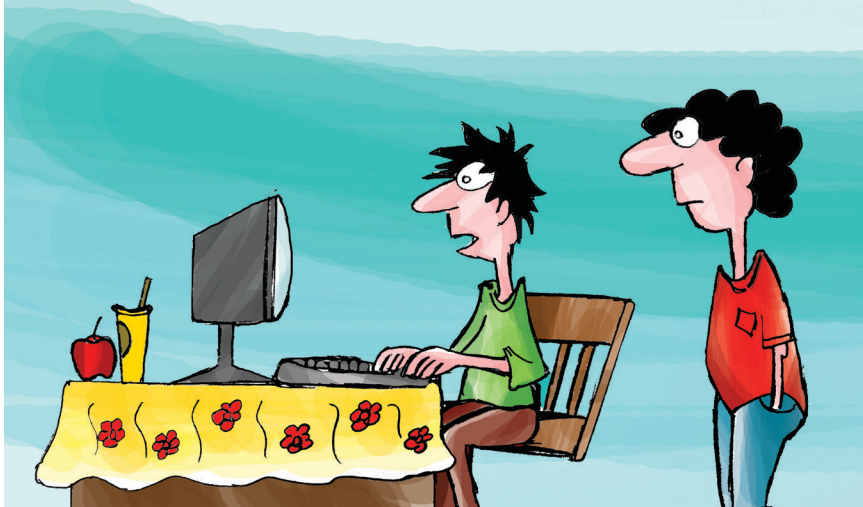
dance’ to all Marianites, which is in line with the Marian vision.

Works Cited

- Delors, J. (2021, May 5). *Education for the Twenty First Century: Issues and Prospects*.
- Fontenoy: UNESCO. Retrieved from <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/rethinking-education>.
- Green-Armytage, P. (2002). Colour Zones -- Connecting Colour Order and Everyday Language”. *SPIE. 4421*, pp. 976-979. Congress of the International Colour Association.
- KSHEC. (2019). *What is OBE?* Retrieved from Overview: <http://www.kshec.kerala.gov.in/index.php/activities/ongoing/outcome-based-education>
- Mahatma Gandhi University. (2020, February 12). *Outcome Based Education*. Retrieved from IQAC Order: <https://www.mgu.ac.in/uploads/2020/02/828-IQAC-2020-MGU.pdf?x18327>
- NBA. (2021, May 9). *National Board of Accreditation*. Retrieved from Accredited Programmes: <https://www.nbaind.org/accreditationprogram>
- Raja Roy Singh. (1991). *Education for the Twenty -first Century: Asia-Pacific Perspectives*. Bangkok: UNESCO Principal Regional Office for Asia and the Pacific.
- UGC. (2014, 11 12). *Instructional Template for Implementation of CBCS*. Retrieved from UGC Website: https://www.ugc.ac.in/pdfnews/4426331_Instructional-Template.pdf
- UGC. (2020, January). *Learning Outcomes*. Retrieved from Learning Outcome based Curriculum Framework for Undergraduate Education: <https://www.ugc.ac.in/e-book/locf/mobile/index.html>
- UGC. (2020, November 6). *Revision of Curriculum based on Learning Outcome based Curriculum Framework*. New Delhi, Delhi, India.

Dr Roy Abraham P. is a veteran academician, visionary and pioneer of academic reforms. He is an indisputable authority on academic autonomy and serves as a resource person for colleges in India. He is also a gifted orator and team leader who inspires his crew to scale great heights.

“



“I hacked into the school computer and changed all my grades. Then the school hacked into my computer and deleted all my games.”

IMPORTANCE OF OBE FOR ACADEMIC STAKEHOLDERS



Dr Jose James
dr.josejames@mariancollege.org
+91 9447150789

The overwhelming importance of restructuring the curriculum and the teaching-learning-evaluation strategies to comply with the needs of the stakeholders cannot be overemphasised. OBE aligns each part of the education system around predetermined goals or outcomes.

There is a huge cry for Outcome Based Education all over the country, especially in the field of higher education. As part of the Washington Accord, signatory countries have decided to give an outcome-based specification for the Engineering programme.

Indian higher education, in the present structure, is at the crossroads. There is a vagueness for the educators, students and parents as to the outcome of what the students learn. The issues are manifold; there is a significant mismatch between the career the students want and those that they actually end up with.

To transcend the realities of the present pandemic scenario, education also has to be transformed to the digital world where we need to teach every student how to learn, unlearn, and relearn the knowledge, skills and attitudes in order to transform the future of work and career for which they are to be moulded.

Students, parents, the community and the government etc., invest time, resources and money in education. However, our universities and colleges

are not updating their curriculum for restructuring, upskilling and reskilling its courses and programs so that graduates can be job ready with skills required to be successful in their work and career. Hence, most of the graduates of our universities/ colleges spend their time, energy and resources in finding a suitable career, and despite graduating from top institutions and programs, most of them end up compromising with their choices.

Students want jobs, not knowledge alone

The prime reason for the students to learn is to get a decent career with financial stability. Despite low unemployment, losing jobs and underemployment etc., it is reported that almost one third of the university graduates who are employed do not actually require their present qualifications.

Students undergo courses and programs without the actual process of acquiring the knowledge and the skills required for a future job and profession. It is also quite unlikely that they value the actual process of learning.

Degree granting institutions need to consider effective curriculum revision

Universities face stiff resistance and challenges from different corners for effective revision of the existing syllabus and curriculum. Teachers and academic administrators are now comfortable with the prevailing syllabus, teaching-learning and evaluation methodology. If we critically analyse, we can undoubtedly state that the curriculum now being followed in many of our colleges and universities are outdated. Teachers and students need more academic innovation and freedom through academic flexibility and autonomy. Most of the teaching hours are now spent in indoctrinating the philosophy and theories of the courses, rather than encouraging the students to learn through applications and hands-on training. Besides, teachers and students are complaining of heavy workload.

Students and parents have unrealistic expectations

Students, in many cases, join the university programs not by their own choice or decision. There are several other factors in choosing academic

There is a significant mismatch between students' dream job and what they really end up with. Application and hands-on training should substitute mere indoctrination of the theory of a course. OBE will transform the present academic scenario.

programs. It is also reported that parents are one of the primary deciding factors, knowingly or unknowingly, in the selection of academic programs of their wards. While enrolling for courses and programs, the students and the parents have high anticipations and expectations about the future. However, it is not feasible for everyone to fulfill these high expectations, and this results in frustration, rejections and negations. Though it is not possible to give everyone their dream job, most of the students expect flexible and meaningful careers or self-employment/job creators after graduation. It is seen that a large number of graduates end up in careers that are not even aligned with their qualifications.

Entrepreneurs are looking for talented and knowledgeable human resources with skills and positive attitudes, not mere bookish knowledge or titles

There is not much scarcity of jobs, but businessmen and employers need appropriate job ready manpower. There is still a significant mismatch between the jobs people want and those that are actually available. The

number of graduates is increasing but the job-readiness and potential to add immediate value to the workplace of the graduates are not growing proportionately. In many cases the employers need to train them to suit their specific needs and requirements.

Regulatory bodies to consider a value-added Degree/ Diploma

It is very difficult to predict how much of the curriculum would be revised in the future, except for the fact that they might require a diverse range of attitudes, knowledge and skills than those the students acquire in the present education scenario. The outcome of what they learn is more important than the certificates they earn from the university.

Education planners and providers need clarity

The present-day curriculum and the teaching-learning-evaluation process do not give any clarity on measuring the extent of the knowledge and the skills a student acquires from the program they undergo. Education planners and providers are confused as to what to teach and how to teach, and also how to assess the progress and the final outcome of the students.

Government needs a futuristic approach

There is much need to reconsider the existing model of higher education. Tomorrow belongs to those individuals who are prepared to face challenges in the job and career market by continuously approaching education that matches with work and the future domains of learning and acquiring new knowledge, skills, techniques and attitudes that are required in a given situation. Success in the future will not be defined by a university degree, but by the potential and the ability to learn, apply, and adapt knowledge and skills with appropriate attitude. It is for the individual student to decide the outcome, and not the parent or the teacher. Teachers are facilitators only.

It is in the light of these facts that Outcome Based Education (OBE) gains paramount importance. OBE provides more room for flexibility for the teachers, the students and the education providers. Here, learning becomes need based, so that the academic planners, the administrators, the providers and the teachers will be able to structure the curriculum and the teaching-learning and evaluation (assessment)

strategies according to the needs of all the stakeholders. It is not dogmatic with respect to method and strategies. As it is highly student-centred, the teachers and the academic providers assume the role of guide and mentor who inspires the students for the effective outcome of what they learn in the most productive manner.

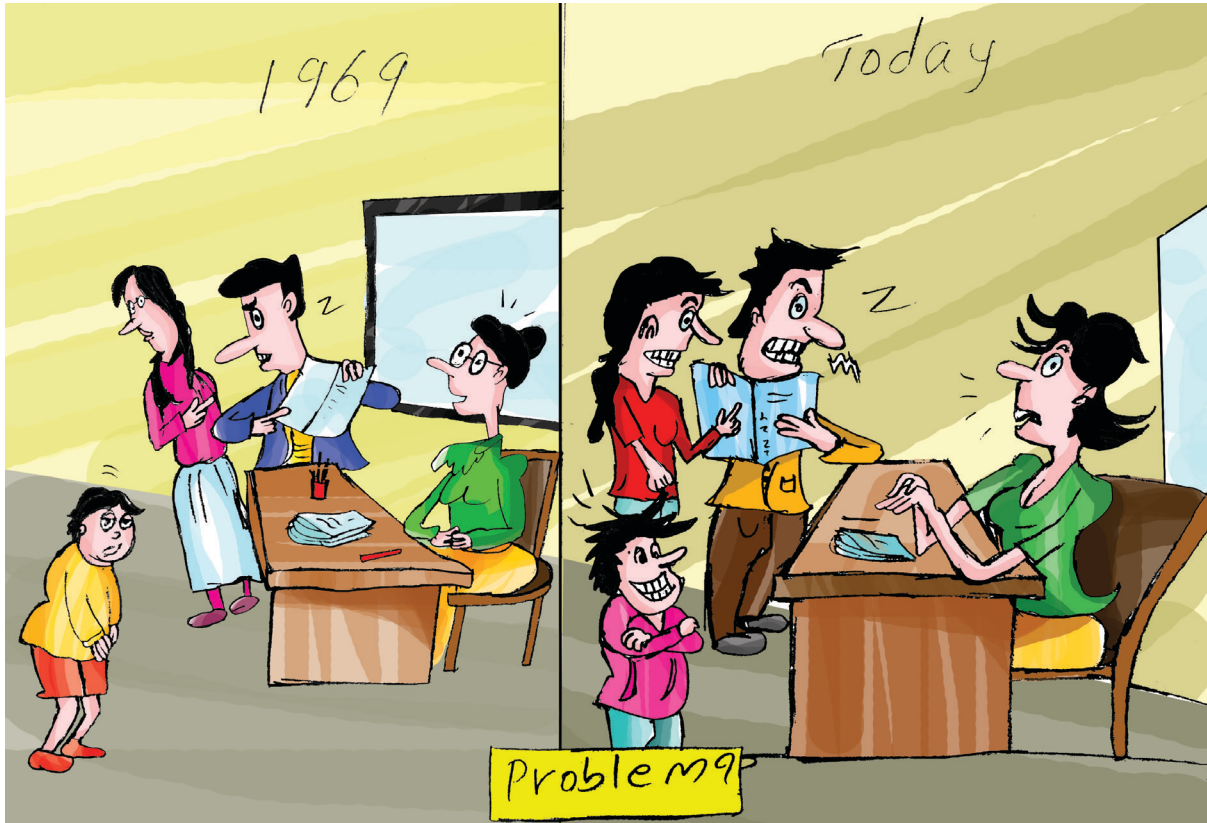
OBE is an educational approach which aligns each part of the education system around predetermined goals or outcomes. This approach ensures that each student, on completion of a course or program, should be able to know or do what the course or program has set as a goal or outcome in a futuristic perspective. The OBE model rejects the traditional attention on what the courses and the programs provide to the student; it focuses instead on making the student demonstrate what he/she is able to do on successful completion of the given learning experience.

Dr Jose James PhD, DSc, Director, LUC Marian Research Centre
Formerly

- Registrar, Mahatma Gandhi University, Kottayam Kerala India
- Dean Academics, Royal College of Applied Science & Technology, RAK, UAE
- Director Academics, Island Development Company, Male, Maldives
- Member of the committee constituted by the Govt. of Kerala, in 2015, to study the feasibility for establishing Private Universities in Kerala

The New Educational Policy 2020 (NEP 2020) is a forward-looking overhaul in this direction that will produce far-reaching and mostly constructive changes in the educational structure and delivery of the country.

“



1969 Explain these bad grades

Today explain these bad grades

THEN AND NOW



The beautiful thing about
learning is that no one can take
it away from you.

B. B. King

OBE IMPLEMENTATION EXPERIENCE AT MARIAN COLLEGE KUTTIKKANAM



Dr Binu Thomas
Binu.thomas@mariancollege.org
+91 9446845140

This is a chapter which shares the first hand experience of the OBE implementation at Marian College. The training methods adopted and various terminologies of the OBE framework are explained here.

When the NAAC came up with the Revised Accreditation Framework (RAF of NAAC) in 2017, to our surprise, we found that the first question itself was this: “How do your POs, PSOs and COs reflect the local, national, regional and global development needs?” We had a vague concept about Course Outcomes (COs), but Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) were new concepts to Marian College.

Our first priority was to develop a clear idea about the concepts like PO, PSO and CO. We formed an IQAC team to study about OBE. The team had consultation with experts from Engineering Colleges that had already implemented OBE and also with foreign collaborating universities. It also referred to guidelines of the UGC, the NBA and the NAAC, etc.

First, we had a meeting of the Board of Studies Chairmen and the Heads of Departments to introduce the concept of OBE, and in the meeting it was decided to implement the OBE curriculum on the campus. Three days of residential workshop on OBE was planned for the entire faculty of Marian College in April 2018.

Objectives VS Outcomes

In the OBE framework, the boundaries between objectives and learning outcomes are vague, and still continues to be a matter of confusion for many of the institutions. If we happen to go through the course outcomes framed by institutions, it is evident that these outcomes are merely the objectives of the course.

In the initial days, Marian also was not different; the sample outcomes designed by the departments were categorized as objectives by the experts we had consulted. Giving a differentiation between the *objectives* and *outcomes* was the first objective of our training strategies.

The objectives are the expectations and aspirations of the teacher about the course he is going to teach. He has to clearly mention what he is planning to teach in the course and it becomes the objective of the course.

The outcomes are the skills, the abilities and the knowledge level that the student is going to demonstrate after completing the course if the teacher meets the objectives. To give a better idea to the teachers in this regard, we defined the objectives of the

workshop in OBE as:

- Introduce the OBE framework
- Teach PO, PSO and CO concepts
- Introduce OBE based assessment

Then we defined the outcomes of the workshop. These were the skills that we expected the participants to develop after successfully completing the workshop. Again, we found that most of the institutions were defining the course outcomes which were not directly measurable or may be very difficult to assess whether the students were demonstrating these outcomes. To bring the attention of our participating teachers to this common mistake and to avoid such non-measurable outcomes from our curriculum, we first wrote the outcomes of our workshop in the most common way (inappropriate) of defining course outcomes. We wrote the outcomes like this:

Upon completion of this workshop the participants will have

- knowledge of OBE
- understanding of PO, PS and CO
- familiarity with OBE terminologies
- understanding of the assessment of learning outcomes

Without any doubt these could be considered as the outcomes of the workshop we planned, but none of these outcomes were measurable and it would be very difficult for us to assess whether the participants achieved the outcomes after the workshop. So we demonstrated a better way of drafting outcomes which were measurable and observable. The outcomes of the workshop were rewritten in a better way and presented thus:

Upon completion of this workshop the participants will be able to

- describe various components of OBE in higher education with confidence
- enlist major components of OBE
- explain the NAAC questions pertaining to OBE
- assess learning outcome in OBE
- define POs, PSOs and COs in Arts, Humanities and Engineering disciplines with clarity
- develop the POs, PSOs and COs for your institution with confidence

It is evident from the above set of outcomes that all these outcomes are measurable, and that it is easy for anybody to assess or observe the

attainment of these outcomes by the participants. In the Bloom's Taxonomy, different learning levels have been defined by Benjamin Bloom, and it is clear that the first two outcomes are at the first ('Remember') level of Bloom's Taxonomy .

The third outcome is reaching the third level and the fourth outcome is reaching the fourth level of the Bloom's Taxonomy. In the framework, it can also be shown that the last two outcomes are at the topmost level, namely, creating something new. When we define our outcomes, it will be a good practice to define outcomes as measurable and reach the different levels of the Bloom's taxonomy.

The workshop was held in April 2018 as planned, and the college was able to implement the OBE framework in its full potential in June 2018. The different components of the OBE curriculum and the way in which we implemented it are narrated in the subsequent sessions.

Purpose of existence of educational institutions

Every educational institution is established to achieve its Vision and Mission. The founders of our insti-

tutions started the higher education institution with a Vision in mind, and the purpose of existence of these institutions is to achieve this Vision.

But the education institutions can do only one activity - teaching our students and sending them out to the society for achieving the Vision and

Mission. The students after graduation from an institution usually work in the society.

When they serve in the society, through them the institution can achieve its Vision and Mission. The OBE framework gives a proper directive for implementing this concept.

PEOs (Programme Educational Objectives)

The skills, abilities and attitudes a graduate is expected to possess after three to five years of graduation from an institution are called PEOs. These PEOs have to be derived based on the Vision and Mission of the institution.

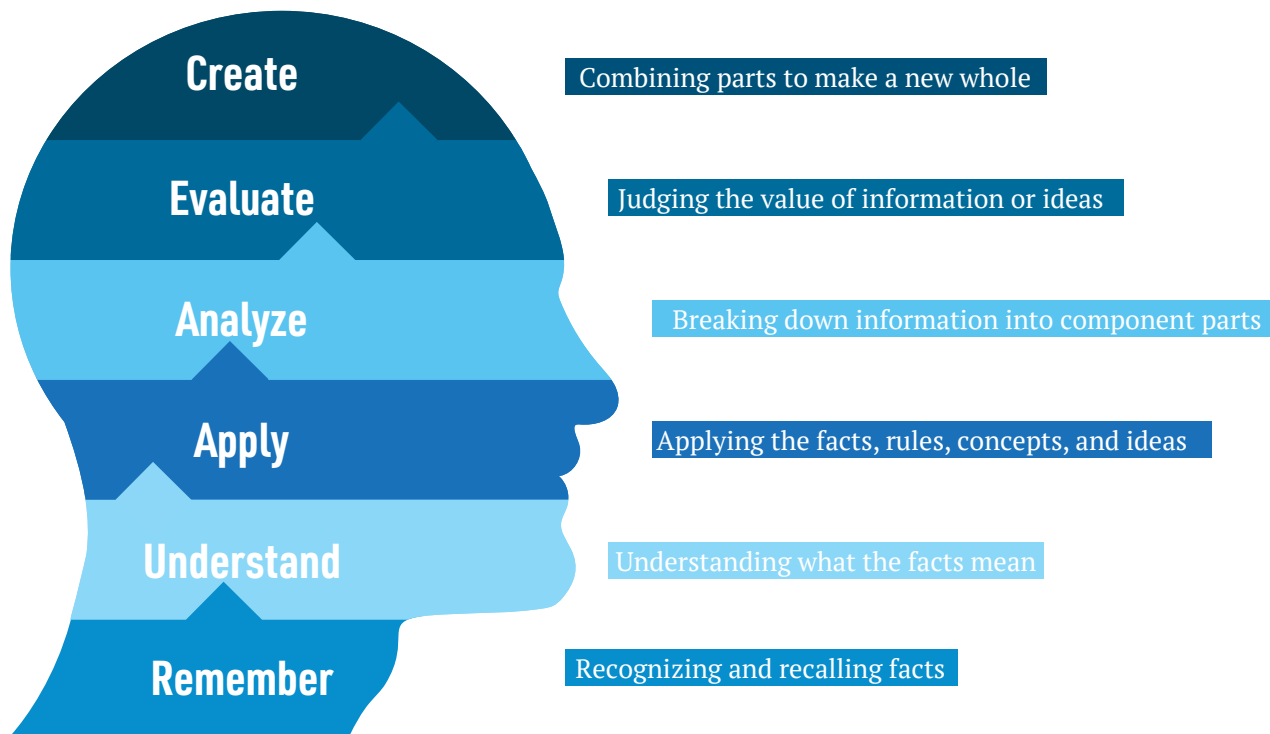


Figure 1. Bloom's Taxonomy – Levels of Learning

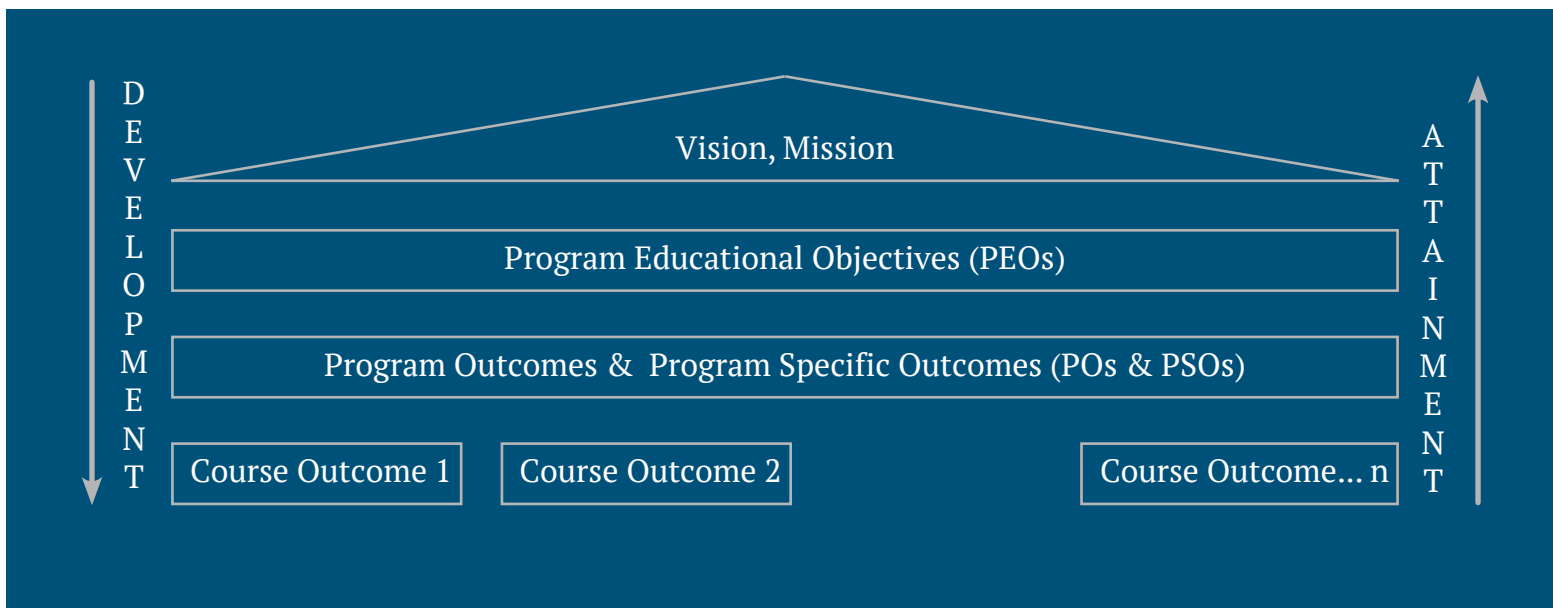


Figure 2. Vision Mission to Course Outcomes – Development and Attainment

Here, the Vision and Mission of the college are formulated into tangible and observable skills which the graduates are expected to demonstrate after three to five years of graduation, and they become the PEOs of the institution.

Programme Outcomes (POs) are the skills, abilities and attitudes the students are expected to possess at the time of graduation. It is expected that, if the students are graduating

with the attainment of POs from an institution, then they will be attaining the PEOs in the future. Thus, the institution will be finally attaining its Vision and Mission when its graduates with the expected PEOs work for the society.

Programme Specific Outcomes (PSOs) are the skills and abilities a student will demonstrate when he graduates from a specific programme from a discipline (e.g., BCA, BSC Mathematics,

BCom, MCom, etc.)

Course Outcomes (COs) are the observable skills and abilities the student is expected to possess after the successful completion of a course. It is a measurable, observable, and specific statement that clearly indicates what a student should know and be able to do as a result of learning. Course Outcomes (COs) are central to your course's curriculum. They articulate to students, faculty, and

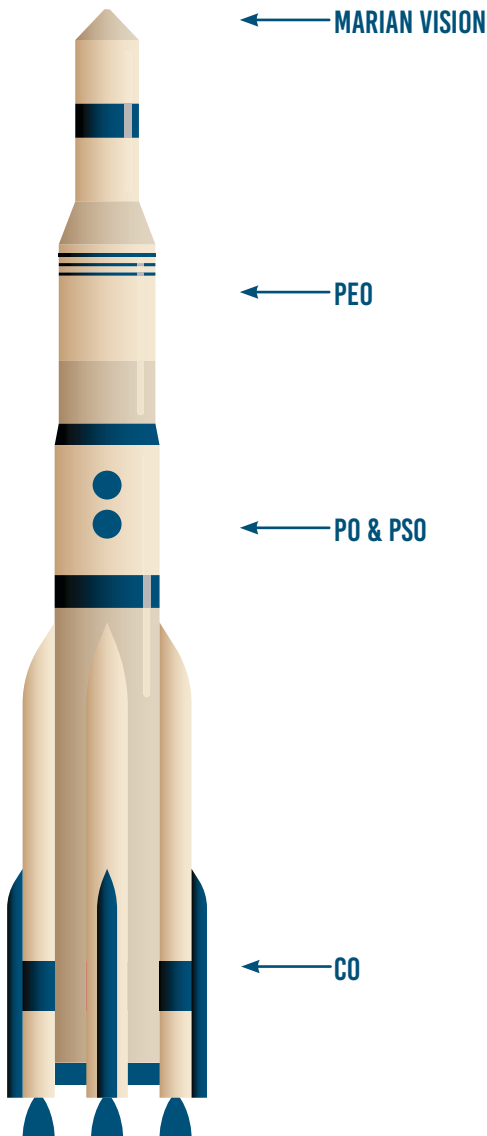


Figure 3. The COs are like the small initial stage rockets which give the initial push to a cryogenic rocket which places a satellite in the orbit, and it is only upto the stage of reaching PO and PSO. POs and PSOs give the next level of thrust to reach the PEO. PEOs will finally push the students to their position in the society where they will stay for a longer period to achieve the Vision and Mission of the institution.

other stakeholders what students will achieve in each course, and how their learning will be measured.

So, in the OBE framework, the PEOs are developed based on the Vision and Mission of the institution. POs and PSOs are developed to attain the PEOs. The Course Outcomes are developed in such a way that once the COs are attained, the POs and PSOs will be attained by the students. Finally, students will be serving the society with the expected PEOs to achieve the Vision and Mission of the institution.

The Vision of Marian College reads thus:

We commit ourselves to achieving our vision through relentless pursuit of knowledge, fostering spiritual and human values, networking and collaborating for synergy, establishing campus-community network, promoting sustainable living, ensuring a learning environment of creativity, adventure of ideas, constant innovation, enabling academic ambience and state of the art Information Communication Technology.

Based on the Vision and Mission statements of Marian College, nine

This chapter gives sufficient introduction to various concepts appearing in the OBE framework. The techniques for defining measurable course outcomes are well explained here.

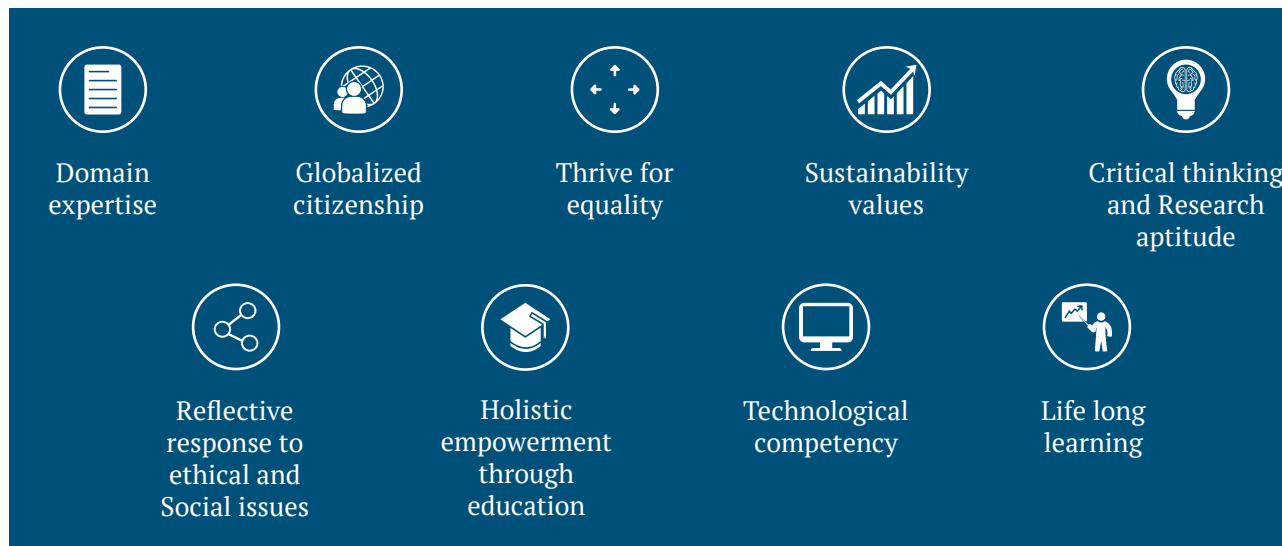


Figure 4. POs of Marian College

POs were developed. All the stakeholders of the college were involved in this process. These POs are the skills and abilities that the students are expected to possess at the time of their graduation. The nine POs of Marian College are listed in Fig. 4.

Development of Course Outcomes

Training programmes and workshops were organized to create awareness among teachers about the OBE framework and to develop the course out-

comes. Departments were instructed by the IQAC to develop measurable and observable course outcomes. Care was taken to ensure that the course outcomes reach the higher levels of the Bloom's Taxonomy. Several rounds of refinement were done on course outcomes so that they become measurable and visible.

Sample course outcomes from the Physical Education Department

For a better understanding of the development of course outcomes, we

shall take the example of a course on "Maintaining Physical Health" offered by the Physical Education Department of the college. The Physical Education Department had submitted very ordinary outcomes; the IQAC refined them to measurable outcomes so that direct assessment of these outcomes would be possible. The following Table 1 shows the original outcomes submitted by the departments, the refined outcomes and the questions that may be asked for assessing these outcomes.

Table 1: Refined outcomes for the Physical Education Department

Original outcomes	Refined measurable outcomes	Questions for assessment
Knowledge about general concepts about Physical education	Ability to describe the need of formal physical education and maintaining physical fitness	Ability to describe the need of formal physical education and maintaining physical fitness
Knowledge regarding health and effect of exercise	Suggest a set of exercises to maintain good physical health in daily life.	Suggest a daily routine for students to maintain good physical health.
Understand the importance of nutrition and balanced diet	Ability to enlist the food items to be included in a daily balanced diet	Suggest a menu for your hostel so that students can maintain a balanced diet.
Scientific knowledge of first aid in daily life	Ability to provide scientific first aid when a fellow being is in a critical health condition	During a rigorous physical training session, suppose one of your friends faints. Explain the first aid procedure to be followed.
Understanding about various hypokinetic diseases and their management	Ability to suggest a lifestyle based on Yoga and physical activities to prevent hypokinetic diseases	One of your friends has a high chance of becoming diabetic due to hereditary reasons. Suggest a daily routine for him to prevent it.

Assessment of Course Outcomes

For the assessment of course outcomes, the assessment activities are planned as before. Then these assessment activities are mapped to course outcomes (refer Table 2).

In the next stage, the marks scored by the students are converted into the attainment of COs through a mapping procedure explained in Table 3.

Table 2. Assessment Activities, Marks and Mapping with Course Outcomes

Item	Activities and marks		Association with course outcomes
Group 1 7.5 marks	Seminar	4	CO1
	Assignment	3.5	CO2
Group II 7.5 marks	Video presentation	4	CO1, CO2
	Group activity	3.5	CO2, CO4
CA1 7.5	Exam 1	5	CO1, CO2
CA2	Exam 2	7.5	CO3
CA3	Exam 3	7.5	CO4, CO5

In accordance with the mapping procedure explained in Table 3, the marks scored by the students are mapped to the corresponding attainment of COs. This procedure is explained in Table 4.

Table 3

Marks	Weightage	Association
0%	0	Nil
1-50%	1	Low
50-70%	2	Moderate
71-100%	3	High

From these assessment activities, the final attainment of COs are calculated by taking the average of CO attainments from all the activities mapped with a particular CO. It can be seen in Table 4 that CO1 is associated with two assessment activities; CO2 is associated with three assessment activities and so on. Suppose a student got 40% and 55% marks in two assessment activities associated with CO1, then the corresponding mapping values are 1 and 2 for these activities. The final attainment of CO1 for the student is calculated as the average of these mapping values (refer Table 5).

After the calculation of attainment of course outcomes, we need to find the attainment of POs and PSOs. Depending on the course outcomes, teaching-learning and assessment activities, we need to associate the

Table 4. Assessment marks & CO attainment marks for a student

Activity		COs	% Marks Awarded	Attainment Mapping
Seminar	4	CO1	40	1
Assignment	3.5	CO2	85	3
Video presentation	4	CO3	70	2
Group activity	3.5	CO2, CO4	85	3
Exam 1	5	CO1, CO2	55	2
Exam 2	7.5	CO3	75	3
Exam 3	7.5	CO4, CO5	40	1

Table 5. Assessment of Course Outcomes

Course Outcomes	Average attainment calculation	Final CO attainment
CO1	$(1+2)/2=1.5$	1.5
CO2	$(3+3+2)/3=2.6$	2.6
CO3	$(2+3)/2=2.5$	2.5
CO4	$(3+1)/2=2$	2
CO5	$1/1=1$	1

course outcomes with POs and PSOs. Here, only the concerned teachers can decide the mapping values based on the activities performed for teaching the courses. The mapping values can be between 0 and 3 depending on

the degree of association between the COs and POs/PSOs. A mapping structure for a semester (five courses) is given in Table 6. In the table, a cell value 0 means there is no association between a CO and a PO. Values from 1

to 3 indicate low, moderate and high correlation. The mapping between CO-PSO is also done in a similar manner.

After the CO-PO and CO-PSO mapping, the attainment of POs are calculated using the attainment level of COs and mapping values from the CO-PO mapping table. The final attainment of a PO is calculated as a weighted average of CO attainment with the mapping values in the CO-PO mapping table. In Table 6, the COs are mapped with PO1 using the mapping values 3,0,2,3 and 1. Assume that the attainment of COs are as per values indicated in the column 2 of Table 7. Then the attainment of PO for this semester is calculated as the weighted average using the equation $(2.16*3+1.85*0+2.52*2+2.01*3+2.56*1)/9=2.23$ (refer Table 7).

The PSOs are also assessed in a similar manner by taking the weighted average of the attainment of COs and CO-PSO mapping table. The POs and PSOs have to be calculated for all the semesters, and finally an average value will indicate the attainment of POs and PSOs for a student.

Table 6. Sample CO-PO Mapping table

CO	P01	P02	P03	P04	P05	P06	P07	P08	P09
CO101.1	3	2	0	0	0	0	0	0	1
CO101.2	0	2	2	3	0	0	0	3	1
CO101.3	2	0	0	0	3	2	0	0	0
CO101.4	3	1	0	0	0	0	1	2	2
CO101.5	1	3	0	0	1	2	1	0	1

Table 7. Assessment of POs

Contributing COs	Final CO attainment	CO-PO Mapping value from Mapping Table	PO attainment
CO1	2.16	3	2.23
CO2	1.85	0	
CO3	2.52	2	
CO4	2.01	3	
CO5	2.56	1	

Dr Binu Thomas is Associate Professor in Computer Applications. He also serves as the IQAC Coordinator of the College. He heads the Marian Institute for Innovative Teaching Learning and Evaluation(MIITLE) as Joint Director. This institute has been established at Marian College for faculty training and to implement innovations in teaching-learning.

“



“Principle McWit, I don’t care how much you interfaced, interacted, coordinated, arranged or organized last month. Just tell me how many of your students passed their standardized tests.”

“



“And here is our annual message to the alumni.”

ASSESSMENTS IN OUTCOME BASED EDUCATION APPROACH: AN INSIDER'S PERSPECTIVE



Mr Biju P. Mani
biju.mani@mariancollege.org
+91 9447 827672

Dr Soosy Joseph
soosy.joseph@mariancollege.org
+919446 224723

The article describes the process of fitting in the new mode of Outcome Based Education in the evaluation system of a traditional Arts and Science college.

Those who can, do; those who can't, teach.' The most scathing criticism on the teaching community came from the Irish playwright and critic George Bernard Shaw a century ago.¹ Though the teaching community has fought against the accusation for a long while, the most proactive approach to challenge this criticism would be to prove that the students assigned to you are made capable of what you have taught them. This is the challenge of Outcome Based Education also.

Marian College Kuttikkanam, only twenty six years of age, is the youngest Arts and Science College and the youngest autonomous college in Kerala. Though young, the institution has managed to become a path breaker in the State's educational scenario. The secret of this success is its commitment to the cause of education, spirit of innovation and the success in carrying along all the stakeholders in its march towards excellence.

In the area of assessment, the institution has been successful in making a distinctive mark and building a Marian Model of Assessment. The successful introduction of Outcome Based Education and Assessment is

one among the many critical steps in the execution of the Marian Model.

The authors of this article have been serving in the Office of the Controller of Examinations (CoE) since 2016, the year in which the institution became autonomous. This has fortunately given us an opportunity to be involved in the designing of the assessment process and the implementation of Outcome Based Education (OBE). The present work seeks to share the experiences and insights gathered. The article is arranged in various sections. The first section deals with the model of assessment designed by Marian. The next section of the article deals with the challenges faced during the implementation of the OBE.

The key insights and suggestions are discussed in the final section, and it is followed by a conclusion.

1. Marian Model of Assessment

The first step in this model was the development of an in-house software for question paper generation. The then existing evaluation models in the colleges across the state in general and the universities in particular, relied on question papers prepared by teachers external to the institution,

The attempt is to explain the background of the introduction of OBE and also the challenges faced in the implementation process. The analysis is from the perspective of the Office of the Controller of Examinations of an autonomous college

which was projected as a compulsory requirement to ensure fair and impartial assessment. However, this model had a serious defect because it created an artificial divide between the teaching and the assessment process. Instead of ensuring an organic interlinking between the teaching and the assessment process, the preparation of the final tool of assessment - the question paper - was left to an outsider who had no knowledge about the curricular transactions that happened in the classrooms. This distortion was addressed by developing a Question Bank system for generating the question papers for Semester End Assessment (SEA).

The Question Bank system was introduced from the first year of autonomy itself, and the system continues till date with necessary modifications and policy revisions. This system had multiple positive effects in the teaching learning process. It equipped the teachers to develop a holistic vision about the teaching learning evaluation process. The quality of the question bank developed by the teachers quickly became an index of the quality of the teaching learning process itself. Most importantly, the exhortation of the institution to set questions catering to assess the

higher order thinking skills of the students based on Bloom's Revised Taxonomy, brought insights to teachers generally, and the various levels of taxonomy quickly became the lingua-franca of the campus. No wonder this model is now emulated by many other autonomous colleges in Kerala, and even the parent University (the Mahatma Gandhi University, Kottayam) borrowed it from Marian.

The second important building block in the Marian Model is the carefully structured Continuous Assessment system. Documents on formative assessments prepared by policy bodies like the University Grants Commission, underscore the importance of a significant proportion of weightage to the continuous assessment system in the overall assessment of student achievement. This soon became a battle front which generated a lot of discussions with regulative bodies. Ultimately, Marian turned out to be the winner, which is exemplified by the new Ordinance of the State of Kerala which permits 3:2 as the proportion between SEA and CA.

Reasonably high marks for CA compelled students to learn on a regular basis instead of resorting to mugging up learning material just before the

final assessment. To install the system on a firm foundation, a definite pattern was evolved which was made applicable to all taught courses. For all taught courses, three examinations were made mandatory. These three examinations named CA1, CA2 and CA3, were allotted marks of 5, 7.5 and 7.5 respectively. To facilitate the assessment process, the versatile Learning Management Software system 'Moodle' was popularised among faculty and students, and CA1 and CA2 are most often conducted through the Moodle platform.

Another area of innovation was the space given for introducing innovative teaching learning tools in the assessment process. As a third step, a significant portion of marks for each taught course (15 %) is awarded for student performance in activities related to deepening learning and assignments that promote research skills. The former set of activities are termed CADL (Continuous Assessment for Deepening of Learning), and the latter is popularised as CARS (Continuous Assessment for Research Skills).

The nature of activities for these two components of continuous assessment is shared with students towards

the beginning of the semester itself, after due approval from the monitoring bodies.

Introducing a high proportion of marks for continuous assessment poses challenges to the institution in multiple ways. One precondition for its effectiveness is ensuring regular feedback and assessment from the faculty to the students.

To ensure timely completion of assessments, an examination calendar is prepared by the CoE towards the beginning of each semester, and the timely completion of assessment activity is monitored. Faculty members are required to complete the assessment and publicise the marks of each component within a period of five days of the examination.

To ensure that these feedbacks reach the students, a module was added to the examination software with a login facility, which ensures verification of scores as soon as the evaluation is complete. The CoE office keeps a tab on the mark entry in the portal.

The college moved on to the implementation of OBE only after ensuring that these systems as described above were in place.

2. Implementing OBE

In the era of globalization, the learning process should equip students with multiple skills which are required to work in a fast changing world. Moreover, the skills required should be of global standards to make them employable in all parts of the world. It is obvious that the traditional education system is not capable enough to meet the requirements of the e-world. Hence, educational institutions adopted the OBE model as their organizational philosophy to produce students with more technological and other skill based competencies.

Outcome Based Education (OBE) is defined as a pedagogical model that entails studentcentric teaching and learning methodology in which the course design, delivery and assessment are planned to set a clear standard for observable, measurable objectives and outcomes. It focuses on the pedagogy and assessment practices to reflect the achievement of high-order learning as opposed to a mere accumulation of marks and course credits.

OBE is a pedagogical model that demands thorough restructuring of the

traditional curriculum. The designing and planning of the curriculum and the adoption of the elements of the course need clarity, flexibility and measurability in all aspects. Those who plan and design the curriculum are expected to work backwards once an outcome has been decided upon; they must determine what knowledge, skills and methodology will be required to reach the outcome.

Therefore, the primary process in the implementation of OBE was a series of workshops to impart thorough knowledge to familiarise the faculty with the concept of OBE and the road-map of its implementation. Experts in the field were brought to the campus, and they gave multiple sessions of training to the faculty, often in small groups. Within no time there developed a pool of experts within the college who were capable of imparting training at each subsequent step, and this helped the institution in successfully implementing OBE.

While designing the course, the designer should keep in mind that OBE is an educational model that maps and measures students' performance at every step. The OBE model aims to maximize student learning outcomes by developing their knowledge and

skills. It is a clearly focused and powerful way of organizing, operating and assessing instructional systems.

The knowledge, skills and attributes that students take away at the end of a program or course are more valuable than what, or how, something is taught. So, we focused on definitive outcomes as the basis for curriculum design. Identifying and correctly articulating learning outcomes are difficult as well as time-consuming. We have to decide on micro outcomes as well. Activities in and out of the classroom can be designed to help students achieve these outcomes. Teachers were trained to adopt innovative training methods in the teaching learning process. They were also trained to adopt many online training tools.

The traditional pen and paper assessment of the taught knowledge is not sufficient for the evaluation of outcome achievements and skill assessments. It requires diverse kinds of assessments at different intervals as well as multiple tools of assessment. In fact, it is a combination of both, theory (traditional) and real-time practice (OBE), which will supplement attributes like interpersonal skills, communication skills and emotional

intelligence that truly determines one's employability. There is no simple or straightforward method to measure the achievements of the students.

OBE aims to facilitate students to have not only deep expertise in one area, but broad working knowledge and skills in multiple areas. After realizing this fact we designed courses with clearly measurable and achievable outcomes. Courses designed on the basis of identified outcomes were subjected to critical scrutiny with the help of an in-house pool of experts. These dialogues were helpful to identify areas of agreement about course outcomes, outcome achievement mapping, and reduce risk factors in mapping. We had several levels of discussions to finalize outcomes for each course so that students could develop multiple skills and interdisciplinary aptitude. We gave emphasis on bench mark setting, innovative teaching techniques, formative assessment strategies, program organization, CO linked course plan, and software supported evaluation and grading, developing software for formative and summative assessment, as well as mapping of achievement in various stages.

The office of the CoE had the opportunity to be involved in the critical transition period of the adoption of OBE on several fronts. Some of those areas are briefly outlined.

- Redesigning courses with achievable outcomes and developing rubrics for measuring achievements.
- Revisiting and fine tuning of outcomes after the first stage of formative assessment for each Programme with the help of a panel of experts.
- Promoting the use of multimedia tools and information technology to make learning more accessible, convenient and productive.
- Giving flexibility to faculty members to stretch their lessons beyond the classroom through CARS and CADL.
- Designing question paper pattern to assess all outcomes in a single question paper of the semester end examination.
- Designing model question papers.
- Designing the question bank model with bouquet pattern for software supported question paper generation.
- Introducing the 'buddy' system for developing question banks and evaluating answer books of semester end examinations.

- Designing score sheet templates for the assessment of outcomes.
- Documentation of students' attainments in formative and summative assessment in a dedicated software which provides students login.
- Designing scorecard to map the achievements of outcomes

3. OBE implementation; insights and challenges

In the Indian context, OBE is a new fad. Though it is often presented with lofty ideals, unfortunately it ends up as a farce. Many educational institutions are content with assessing the formative evaluation part in the form of continuous assessment alone for OBE, leaving aside the summative assessments (scores in semester end assessment) unassessed. This is a serious drawback because of the fact that a major part of the score in the traditional Indian system of education is assigned to semester end evaluation. Marian dared to link outcome analysis to Semester End Assessment also, and this, we hope, makes the process more scientific and comprehensive. However, this has brought in a lot of challenges in its wake which we are addressing right now.

Another issue is indirect assessment of outcomes. We identified that the correct approach is direct course outcome assessment, and this raised phenomenal challenges which we were able to address with the help of a dedicated software.

The most important challenge was the framing of appropriate questions for the question bank. Many of the faculty members were pushed to their limits in the process of identifying challenging and appropriate questions that would help the proper assessment of outcomes. Involvement of multiple faculty colleagues in brainstorming on the appropriateness of questions was an innovation that helped to tide over the issue. Similarly, setting a pattern for placing these questions for the Semester End Examination also required detailed deliberation at various levels. The traditional models of question papers which give options to students from a large pool of questions were found unsuitable for the OBE assessment because the final outcome should be based on evaluation of all intended course outcomes.

Identifying an appropriate mode for assessment of the semester end examination is also a challenging task.

Only teachers who are well versed in a course would be able to appreciate the answers given by students. Those questions which provoke higher order thinking skills shall fail to fall into any definite pattern which would be anticipated while preparing an answer key for evaluation. The buddy system which we identified helped us to tide over this critical phase.

It is observed that by implementing OBE, in fact, the faculty members' potential for higher order thinking, effective leadership, performance, professionalism and capacity of risk taking has improved. Every faculty member is compelled to go into a new organizational culture of 'lifelong learning'. The accountability of course facilitators for the results of their decisions and classroom practices has also increased. Faculty collaboration, as well as support for the effective and responsive implementation of the curriculum, is remarkable.

4. Conclusion

Marian is aware of the fact that implementing Outcome Based Education is a challenging journey, and we have only begun the intellectual exploration which will take us to the destination. At

present, our attempts to implement the OBE principles are only an extension of traditional practices. We used a structured and limited number of outcomes in the first phase of the implementation. We have to find ways to improve the approaches for the successful implementation of well-defined micro and macro course outcomes in the future.

Almost all faculty members had had their education in the traditional learning environment, and therefore implementing OBE was no easy task. It required a leap of faith from a world of certainty to an unknown darkness based on intellectual convictions alone. The beauty of the Marian OBE transition is that we had the courage to do it.

Marian faculty has outgrown the criticism of Bernard Shaw. Now we

1. The statement is attributed to George Bernard Shaw, Man and Superman, (1903).
2. In the case of programmes which assess performance in a direct grading system the weights are 2,5, 3,75 and 3.75 respectively out of a total weight of 50 for a course.

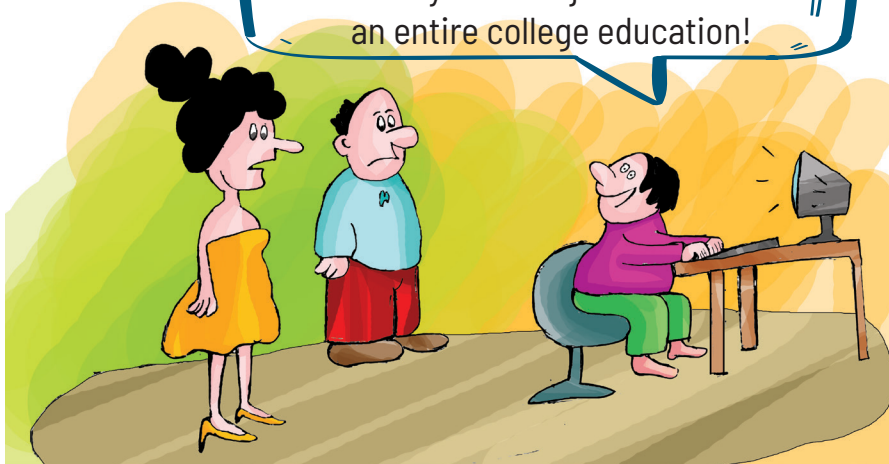
Mr Biju P. Mani is Associate Professor of Law and Controller of Examinations. He has been serving in the Office of the Controller of Examination of Marian College Kuttikkanam (Autonomous) since 2016.

Dr Soosy Joseph is Associate Professor and Additional Controller of Examinations. She has been serving in the Office of the Controller of Examination of Marian College Kuttikkanam (Autonomous) since 2016.

can quote Aristotle who said, "Those who know, do. Those that understand, teach."

“

You don't have to worry about my future any more - I just downloaded an entire college education!



RECEPTIVENESS ASSESSMENT OF OBE: REFERENCE TO THE BENEFICIARIES OF THE DEPARTMENT OF BUSINESS ADMINISTRATION



Dr Joshy John
joshy.john@mariancollege.org
+91 9447420027

Ms Melby Joseph
melby.joseph@mariancollege.org
+91 9447572755

Fr Dr Sibichan Joseph
fr.sibi@mariancollege.org
+91 9447127297

Ms Simi John
simi.john@mariancollege.org
+91 9744058000

This article is a compilation of the processes adopted by the Department of Business Administration while implementing OBE. It discusses the various issues of OBE related to its enactment and the challenges encountered in the curriculum implementation.

Outcome Based Education (OBE) being the latest paradigm shift sweeping through the education system, requires students to be responsible for their own learning.

In this system, the assessment of learning is based on outcomes instead of the contents taught. The increasing need to produce more able and competitive learners for the globalized world has led to this reform in the education system whereby learning is no longer a unilateral process but has shifted its weight to be borne by the learners.

In contrast to the traditional education, OBE puts much emphasis on the learning process being actively pursued and managed by students themselves; lecturers only act as facilitators in the students' quest for knowledge.

Specific and clearly defined outcomes must be described to the students so that they will be able to set their own expectations and discover means to achieve the desired outcomes. As such, the role of the lecturers is to guide the students and provide them directions to navigate their own learning.

Marian College Kuttikkanam (Autonomous) has emerged as the pioneer in espousing OBE in the Higher Education scenario of Kerala. The institution and the departments which offer various programmes have toiled hard to blend program specific knowledge along with complementary knowledge areas, skills and attitude, integrated with the ability of lifelong learning. Adhering to the policy manual of Marian College related to the implementation of OBE, the Dept of Business Administration has followed the following process in the development and delivery of OBE.

To understand the prime requirements of OBE – clarity of objectives, pedagogy, assessment tools and achievement of targets – the faculty team partook of various training sessions initiated by the institution. Discussions with experts – external and internal – were followed by brainstorming sessions in the department.

The faculty team participated and contributed towards framing the Programme Outcomes of the institution. In the next stage, after various rounds of discussions, the Programme Specific Outcomes of BBA were crafted. Later, the Dept of Business Administration restructured the syllabus.

bus of the 2020 admissions integrating the principles of OBE in their true sense. Introducing measurable Course Outcomes (COs) for each course of the Programme was the foremost of the efforts.

Coming to the delivery side of OBE, an array of experiments was tried by the faculty members during the first semester of the 2020 admissions (September 2020 – March 2021). The efforts taken are shared in the later part of this article. It was truly a challenging journey from the germination to the transmission of OBE at the Dept of Business Administration. The process is depicted in Fig. 1.

Journey alongside the OBE Approach

The faculty team of the Department of Business Administration travelled alongside the OBE approach throughout the entire first semester of the BBA Programme 2020 – ‘21 admissions. They made a focused effort and confronted challenges to ensure that each student of the batch crossed the threshold of the OBE approach.

A chronicle of their efforts

is given below.

Ms Melby Joseph, faculty. Course: Managerial Economics

Engaging a large class room online, where 90% of the students were familiar with the basic concepts of Managerial Economics seemed easy to a person who had 18 years of teaching experience. But the reality differed when the teaching-learning process took place under the OBE approach, and the students were those who had come through the traditional method

of learning where they used to mug up or merely understand the concepts, which alone would take them to the heights of academic excellence.

Introducing Course Outcomes to the first-year undergraduates was found effortless in the beginning, but it became tough as the course proceeded with continuous assessments where the students were not able to connect the answers with the outcomes projected.

The majority of students had a ten-

Process of OBE followed by the Department of Business Administration

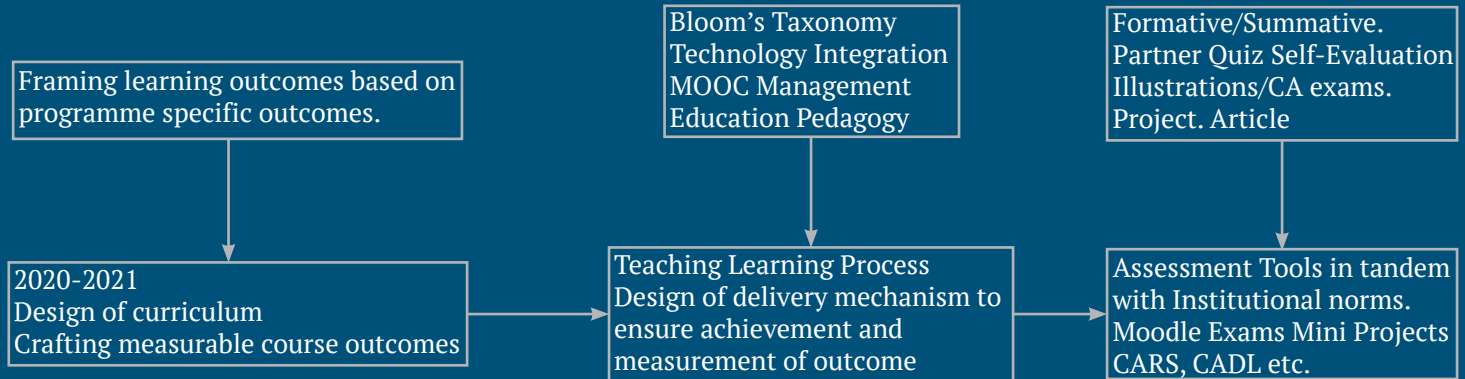


Fig. 1

endency to stop with the basic concepts and were reluctant to go beyond that. In spite of a series of discussions on Course Outcomes, rubrics, resource sharing and brainstorming, it was disappointing to realize that the achieving of outcomes was not registered by the students as intended.

Fr Dr Sibi Joseph, faculty. Course: Principles of Management

Implementing teaching and learning in the context of outcome-based curriculum in a course entitled 'Prin-

ciples of Management' was an eye opener for both the students as well as the teacher. As is recommended in OBE, a backward design approach was used where learning outcomes are identified first; how achievement of the results would be assessed is determined second; and how the learning activities and instruction methods would be planned is determined third, with the main priority being the students' engagement through active learning.

Identifying the outcomes to be

achieved at the very outset of the semester, enabled the students to be more focused in their pursuit of knowledge gathering. Having the outcomes clearly set at the beginning made them more empowered to tread their journey through various concepts and principles. Principles of Management, being a course having direct industry applications, was made more student friendly through various case studies and simulations. Students were made to look at every concept and principle as if they were trying to apply that concept in the

organization they are part of. Case study-based discussions on ethical issues in industries helped students to get a hands - on sense of ethical dilemmas in industries. Application of management principles developed over centuries enabled them to gain a solid foundation in management practices.

One of the challenges faced in the implementation of OBE in this course has been the lack of clarity and lack of in depth-understanding of the concepts. As undergraduate students, they need to get into the nuances of the concepts as much as possible but the focus on application curbs this primary objective.

Ms Simi John, faculty. Course: Law

Journey alongside OBE – a complete stranger to me – was truly sore and challenging. But as we moved a fair distance together, I realized that OBE was a philosopher who would guide and direct us to ensure results from our students.

Being the facilitator of the course ‘Law’, it was really thought-provoking to do reverse engineering with regard to course planning, i.e., identifying the desired outcomes and then design

the teaching-learning process to reach those outcomes. Being a rookie to the OBE approach, I will list down the following as the specific challenges I faced in this regard:

- Initially, I struggled to make sure that my assessment instruments were feasible, that there were multiple methods for assessing student learning throughout the semester.
- In each class, it was too difficult for me to ask the students to do exercises and answer questions designed to get them thinking about how the particular legal principle discussed actually applied in the day-to-day practice of business. On a virtual platform, addressing a very large group is truly difficult.
- My challenge throughout the semester was how to connect my presentation of the legal principles to the outcomes of the course. I believe it worked for my students.
- For semester end assessment, I gathered questions from various sources and modified them to fit the themes and emphasis of the

course.

At the end of the semester, from the feedback of the students, it was very evident that the OBE approach had instigated in them a change in the process of learning.

Methodology

Faculty members who taught courses following the outcome-based approach were asked to share their experiences and the challenges they had faced while disseminating the curriculum. A survey, following the census method was conducted among the sixty (60) students of I Semester BBA 2020 –‘21 batch. A questionnaire was prepared and circulated among the students through Google forms, and the responses collected. Eight questions constituted the questionnaire which was circulated among the students who had completed the I Semester studies under the outcome-based approach. The questions were framed in such a way that the receptiveness level of the beneficiaries could be checked. It included questions about their understanding related to course outcomes, changes implemented in the learning process, transformation of the teaching- learning process, understanding of semes-

The study is an eye opener towards the veracity of the efforts taken by the institution and the faculty. It conveys a true picture of the students' understanding of OBE and underscores the need for sustained training sessions for faculty and students.

ter end assessment questions and the acceptance of teaching strategies.

Results and discussions

Data collected from the population identified was analysed using the simple percentage method. The responses related to all nine questions revealed the level of receptiveness of the OBE approach among the I Semester BBA students after they had really experienced the same. Most of the responses were encouraging, and in some other cases, the students spoke of their lack of clarity in this regard.

I. Level of understanding linked to course outcomes

The first question, 'Are you able to understand the course outcomes associated with each course?' was asked to gather understanding related to the course outcomes of each course. The results are presented in the Fig. 2.

Thirty students (51%) responded that they could understand the course outcomes of various courses to the fullest 'sometimes', and twenty-one students (36%) said they could understand the

Count of are you able to understand the course outcomes associated with each course?

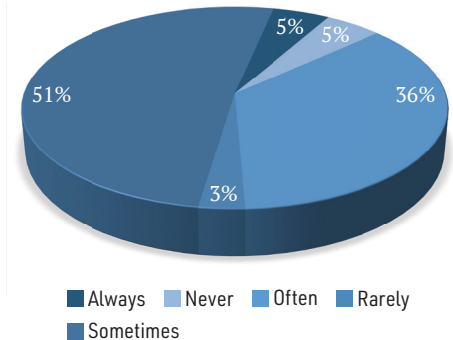


Fig. 2

same 'often'. 5% each responded 'always' and 'never'. The results indicate that students, when introduced to a new system (OBE), find it slightly difficult to understand the same to the fullest. At the same time, it is a clear indication of the efforts from their side to acclimatize themselves to the innovative system.

II. OBE as a catalyst of change in the learning process

Transformation in the process of learning is needed to produce outcomes at the end of OBE.

A question was asked to find out whether the OBE teaching-learning process had initiated a change in the learning process of the students. The results are presented in Fig. 3.

Count of has OBE changed your learning process?

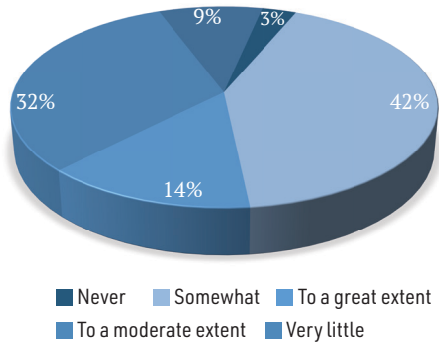


Fig. 3

14% of the respondents said that OBE brought about a change in their learning process. 42% said 'somewhat', which is an indication of the beginning of a change. 32% of the respondents said, 'to a moderate extent.' This response is also encouraging and shows that a good number of students have accepted the OBE approach in a positive manner and have started to alter their learning process ac-

ordingly. The department has to design strategies to bring in the 9% ('very little') and 3% ('never') to the OBE bandwagon.

III. Understanding of the OBE-based semester end questions

Semester end assessment was done by preparing OBE-based questions. Students, being exposed to this type of questions for the first time, responded in a varied manner.

Count of are you able to interpret and respond to the OBE based semester end questions?

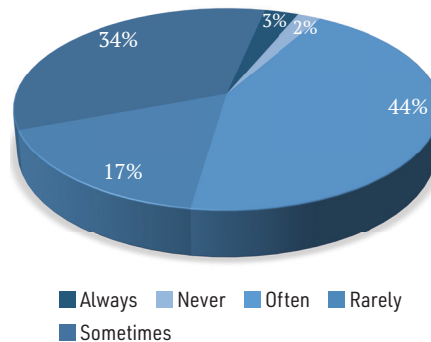


Fig. 4

Only 3% of the students said that they understand it to the fullest 'always.' 44% are able to under-

stand it 'often,' and 34% are able to understand it 'sometimes.' These figures are encouraging given the fact that these students were exposed to the OBE-based assessment for the first time.

The faculties have to address the 17% and the 2% of students who have responded 'rarely' and 'never' with regard to their level of understanding about the OBE-based questions.

IV. OBE equipping students to apply conceptual knowledge in a practical situation

The objective of the OBE approach is to ensure that students gain conceptual knowledge with clarity so that they could apply it with effectiveness in a given situation. The results related to the question to assess the same is given in Fig. 5.

In Fig.5, 66% of students are of the opinion that the OBE approach will make them better equipped to apply the conceptual knowledge earned in a practical situation with great effect. 12% agree to the same in a very strong manner. Attention should be

Count of do you think that OBE base approach will help you to apply the conceptual knowledge in a practical situation?

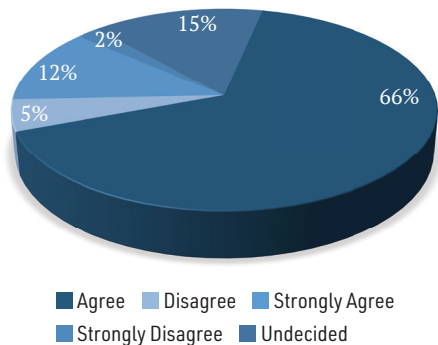


Fig. 5

extended to those who responded in a negative manner to this question.

V. Change in attitude towards learning

The primary objective of the OBE approach is to transform the students' attitude towards learning. The results of the question asked in this regard is depicted in the Fig. 6.

The Fig. 6 brings out inspiring results. The majority of students feel that the OBE approach en-

Count of how OBE transform students attitude towards learning?

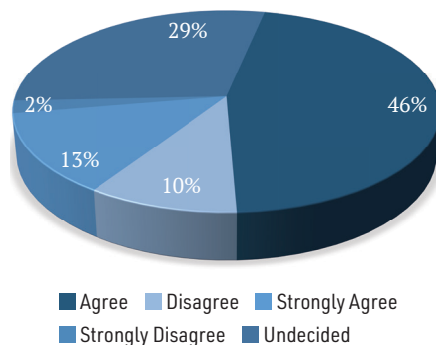


Fig. 6

kindled a change in the learning process. 46% 'agree' and 13% 'strongly agree' to the statement. A matter of concern is that 29% remain 'undecided' in this regard. The 'disagreement' of the 12% is significant and needs to be addressed.

VI. OBE approach simplifying the teaching-learning process

Yet another goal of the OBE approach is to hasten the teaching-learning process. During the I Semester of the 2020 - '21 batch, the department dispersed the curriculum keeping this goal in mind. To what extent have these efforts

helped the students to acclimatize to this pedagogy is depicted in Fig. 7.

Count of how OBE transform students attitude towards learning?

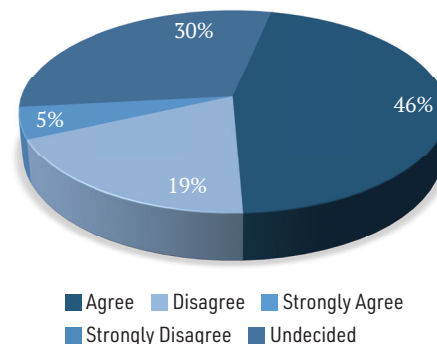


Fig. 7

In Fig. 7, 46% 'agree' that the OBE approach has simplified the teaching learning process and 5% 'strongly agree' to this statement. 30% of students have less clarity regarding this. 19% of the respondents think that the OBE approach has not simplified the teaching learning process.

VII. Understanding the concept of OBE

The effectiveness of the OBE ap-

proach is directly correlated with the proper understanding of the same. Responses were collected in this regard from the students. The responses are presented in Fig. 8.

Count of to what extent you are able to interpret the concept of OBE?

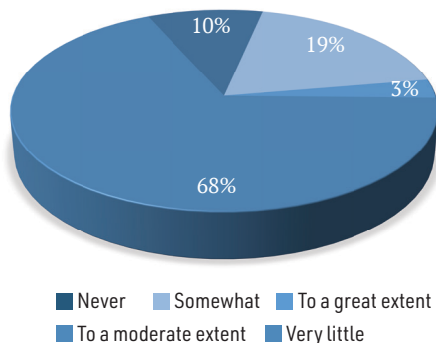


Fig. 8

From Fig. 8, it is clear that the level of understanding of the students with regard to OBE is at a 'moderate' state. 68% of the responses suggest that. 22% (19%+3%) of the students have a 'better' understanding of the concept. Here, the majority having 'moderate' understanding is a positive indicator because the students have completed

just one semester under the OBE approach.

Methods of teaching

Students were asked to suggest the curriculum disseminating methods they like the most under the OBE approach. The results are shown in Table 1

Students were given the liberty to choose more than one method. Results indicate that each method adopted by the faculty has gained acceptance among the students.

Major findings and suggestions

An analysis of the data collected throws light on the level of receptiveness of the OBE approach in teaching-learning among the beneficiaries of the Department of Business Ad-

ministration. It enabled the researcher to make significant inferences with regard to the same.

Students' understanding of the course outcomes of each course is encouraging especially since they were being exposed to this mode for the first time. The majority has made a sincere attempt to comprehend the course outcomes published and elucidated by the faculty. The results point to the fact that the OBE approach has acted as a catalytic agent in bringing about a change in the learning process of the students.

When it comes to understanding the assessment mechanism, especially the OBE-based semester end questions, students are not at ease. The majority find it a bit difficult to comprehend the questions to their core. The beneficiaries are confident about the

Method	Count of Students
Case Studies	18
Lecturing + Case Studies	27
Discussions & Presentations	29
Mini Projects	30
Management Games	33

Table 1

end result of the OBE approach. The majority believe that this approach will help them apply conceptual knowledge in a much effective way in a given situation.

At the end of the semester, students need much more clarity about the OBE approach. The results regarding question number 6 are an indicator towards the same. Further, the results suggest that students realize that the OBE approach is adept at simplifying the teaching-learning process.

The primary goal of the OBE approach is to bring about an attitudinal change in the learning process of the students. The results of the survey bring out a positive note on this. The majority of students have responded that OBE has ignited a change in their attitude towards learning.

The faculty have followed diverse methods in disseminating the curriculum to the students. The results of the survey indicate that lecturing + case study, discussions + presentations have gained great acceptance among students with regard to the OBE approach of teaching-learning.

Across the board, findings of the study are encouraging, consider-

ing the fact that the students were exposed to the OBE approach for the first time after having been trained in the traditional system for quite a long time. Moving ahead, more focused orientation is needed for the students to adapt themselves to the OBE approach.

Incessant perusal is required to ensure familiarization of OBE and its nuances to the students. The department and the institution as a whole should not restrain from measures needed to make the OBE approach a veracity on the campus.

Training sessions to faculty and students by external and internal resource persons should be sustained. Interdepartmental sharing of experiences in this regard will also light up the whole process. As the students progress through the imminent semesters, relentless efforts would ensure the strengthening of the OBE approach as the mechanism of the teaching-learning process at Marian.

Conclusion

Outcome Based Education (OBE) is the latest paradigm shift sweeping through the education system. In contrast to the traditional education, OBE

puts much emphasis on the learning process being actively pursued and managed by the students themselves; the lecturers only act as facilitators in the students' quest for knowledge. Marian College Kuttikkanam has led the movement in the higher education scenario of the state.

After completing a semester under OBE, the Department of Business Administration made an effort to know the experiences and challenges faced by its faculty team, and to assess the level of receptiveness of OBE among its beneficiaries.

The study is an eye opener towards the veracity of the efforts taken by the institution and its faculty. It has conveyed a true picture regarding the students' understanding of OBE. A very encouraging study, it throws light on the shady areas where greater effort is required to acquaint the students. Experiences of the faculty also point towards the same. More focused endeavour would certainly strengthen the process of the OBE approach.

References:

- Spady, W. (1994), "Outcomes based education: Critical issues and answers". Arlington, VA:

American Association of School Administration

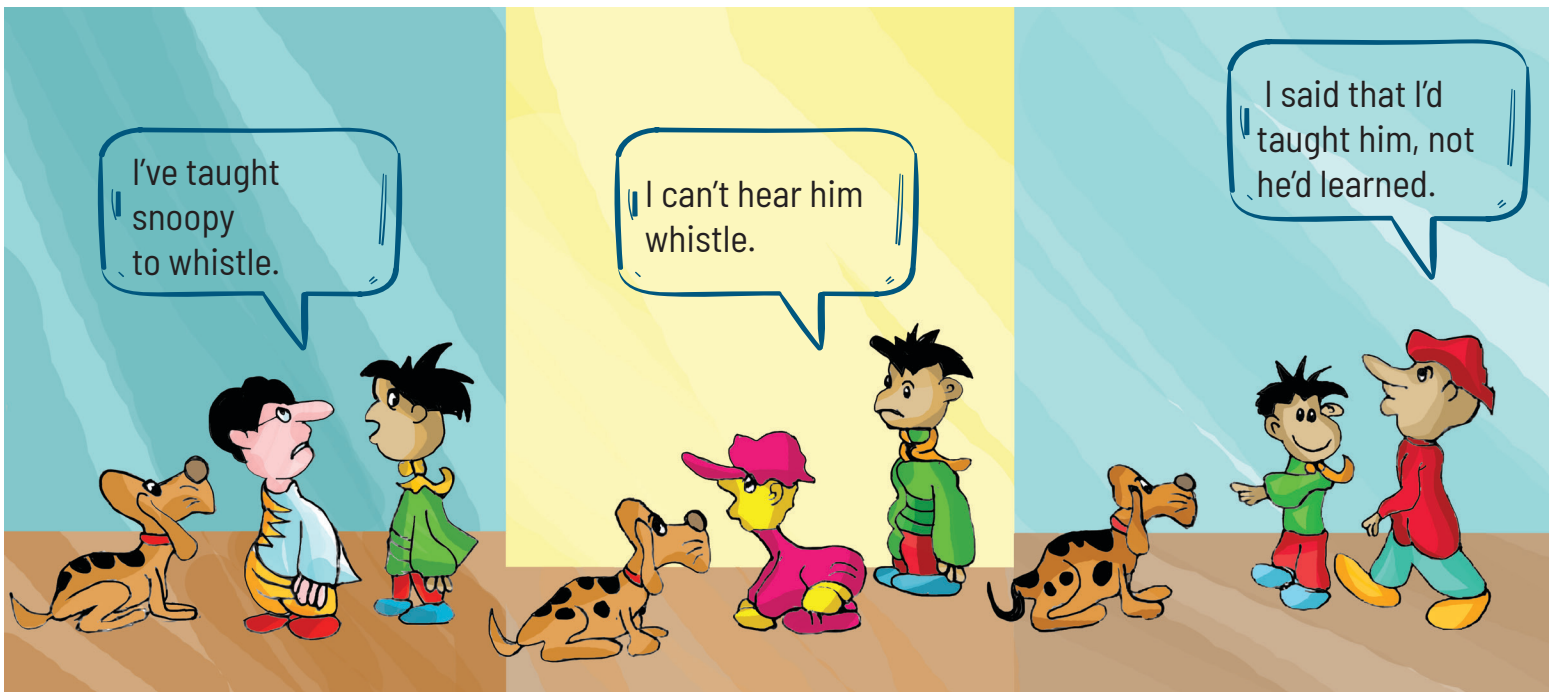
- McDaniel, E. A., Felder, B. D., Gordon, L., Hrutka, M. E. & Quinn, S. (2000). "New faculty roles in learning outcomes education: The experiences of four models and institutions." *Innovative Higher Education*. 25(2). 143-157
- Adedoyin, O. O., Shangodoyin, D. K. (2010) 'Concepts and practices of Outcome based education for effective educational system in Botswana', *European Journal of Social Sciences*, 1392, 161–70.
- Harden RM, Crosby JR, Davis MH. 1999. "AMEE Guide No. 14: Outcome based education: Part 1 - an introduction to outcome-based education". *Med Teach* 21:7–14
- Bouzlama, F., Lansari, A., Al-Rawi, A., Abonamah, A. (2003) 'A novel outcome-based educational model and its effect on student learning, curriculum development, and assessment', *Journal of Information Technology Education*, 2, 203–14
- Faouzi, B., Lansari, A., Al-Rawi, A., Abonamah, A. (2003) 'A novel outcome-based education model

and its effect on student learning, curriculum development, and assessment', *Journal of Information Technology Education*, 2, 203–14.

Dr Joshy John, Ms Melby Joseph, Fr Dr Sibichan Joseph, Ms Simi John

Faculty team of the Department of Business Administration, Marian College Kuttikkanam. They have an average experience of more than 15 years in Management Education.

“



AN EXPERIENCE OF AN EXPERIMENT WITH OBE



Dr Chackochan J. Njavallil
chackochan.njavallil@mariancollege.org
+91 9447572513

Ms Neethu Anil
neethu.anil@mariancollege.org
+91 9061206209

The article narrates the story of an experiment undertaken by a team of faculty members along with students in the context of the OBE implementation.

The context - Marian College Kuttikkanam decided to adopt the Outcome Based Education derived from the policies formulated by the Government of India, the University Grants Commission and the affiliating university. In tune with the above decision, the faculty were provided with several orientation and training sessions and were asked to revamp the syllabus, methodology of teaching, examination patterns, etc. It was not easy as the faculty themselves were new to the concept, there were practically no models to look up to or people to consult with, yet all the faculty members made an earnest effort to redesign the syllabus keeping the outcomes in mind. The examination question papers also had to be redesigned to suit the new methodology and evaluation.

The experiment - The information I am going to present before you is in connection with the Course **PMM2002 Enterprise Innovation and Small Business Management**, one of the courses for the Master of Commerce (M Com) Post Graduate programme in the first semester. The number of students in the class were only fourteen (nine girls and five boys). This was a very unique course which incorporated elements of

Start-ups, Innovation and Entrepreneurship. As this unique course was offered only at Marian College Kuttikkanam (Autonomous), there were no prescribed text books or study material available.

The following were the five outcomes identified for this course:

- Understand the concepts and framework of small business enterprises.
- Get familiar with the managerial aspects of small businesses
- Apply theoretical knowledge in the setting up and management of small businesses.
- Formulate and implement strategies for sustained growth of small businesses.
- Design innovative business models on existing and emerging business areas.

Achieving the outcomes was a challenge, and for that purpose the following things were done under the supervision of the faculty. “Don’t teach but make sure that they are learning” was one thought which emerged in consensus after a faculty training session on OBE at the college, and thus the innovative idea was developed keeping that in mind.

The independence given by the Principal of the college to experiment with new and innovative teaching methodologies, the atmosphere of freedom and entrepreneurship, positive feedback, encouragement and support from faculty, the ownership, hard work, dedication and cooperation of the students, positivity and other factors significantly unique to Marian, contributed to the effective implementation of the idea.

Some helpful factors - The independence given by the Principal of the college to experiment with new and innovative teaching methodologies, the atmosphere of freedom and entrepreneurship, positive feedback, encouragement and support from the faculty, the ownership, hard work, dedication and cooperation of the students, positivity and other factors significantly unique to Marian, contributed to the effective implementation of the idea.

Task - Keeping the outcomes in mind, the students were asked to do three things:

1. Produce a certificate of successful completion of a MOOC course related to entrepreneurship and start-ups within the specified time.
2. Prepare and publish an e-book containing all the topics included in the five modules of the course, PMM2002 Enterprise Innovation and Small Business Management. For that purpose, the students identified a person-in-charge, divided themselves into five groups, with each group working on a module.
3. Launch a business of their own which generates revenue.

Methodology - There were no teaching sessions in the traditional sense. The idea was to '*teach without teaching*', but there was a weekly feedback and evaluation session modelled on a director board meeting. It was a time for updates, course corrections, questions, answers, addressing the concerns, handling discouragements, clarifying doubts, etc.

Result

1. All the students participated in the Entrepreneurship-related MOOC courses and produced the certificates.
2. The e-book was published with the title *Start-ups - A Dream to Reality*. This e-book contains a host of useful material for anyone interested in initiating an enterprise. The following are the different segments which can be found in the book:

- Text material
- Summary points
- Objective type questions
- Application oriented questions
- Case-lets
- Reference material, etc.

The book was subjected to plagiarism checking, and it emerged

within approved limits.

Scan the QR code for reading the e-book



3. The most challenging part was initiating a revenue generating business. After considering a lot of ideas and proposals, it was decided to build a support facility for start-ups. In connection with that the following specific activities were decided upon:

- Creating an e-mail id *startupseva@gmail.com*.
- Starting a YouTube channel for sharing videos, with the intention of monetising it later, through which start-up support materials can be made available with the name 'Startup Seva'.
- Creating a website for sup-

porting the proposed business activities, promoting start-ups and entrepreneurship, with information about books, write-ups regarding films with related themes, glossary of terms, contact information for start-ups and entrepreneurship guidance.

Then came the roadblocks. Any further progress with the idea required the creation of a permanent website which required the purchase of server space, etc., and that demanded capital investment. We had to set up a professional website to build market acceptance and generate revenue. Though we were confident about our idea, more time was needed to build a reputation in the market which we were sure was not possible in the short run.

The capital investment needed to set up the website and other legal requirements was not very huge but for the batch of students, primarily from humble backgrounds and especially in the context of the financial struggles due to Covid-19, was not easy to mobilise. We, the faculty, offered to share the cost but that also was insufficient. It was a morale draining situation and the students were losing their

confidence. As the faculty, we felt the students were losing assurance in us.

Then the breakthrough happened – to offer a course for those interested in the same topic, 'Start-up - Dream to Reality'.

After that everything began falling into place. Announcements were made, posters were circulated and google forms were shared for registrations. All the materials prepared earlier were useful to conduct the course. In addition to that, various video sessions were prepared. The promotional videos, creatively prepared by the students attracted many. There were 184 registrations, much to the exhilaration of the student team that organised the course, 'Start-up – Dream to Reality'.

Finally, the Principal of the College inaugurated the course – the time period for which was 30 hours – in early February 2021.

The participants were divided into four WhatsApp groups for effective coordination, while the student mentors continued with follow-up on the batches.

The scheduled course completion was on the 1st of March 2021. On that date, 88 students (48%) had suc-

Start-Up- Dream to Reality

cessfully partaken of the course. On later inquiry, it was found that one major reason for the less-than-satisfactory completion percentage was the semester-end examinations that had concurrently taken place for the majority of the participating students. In light of this, the organisers are planning to give them another opportunity to complete it post their examinations.

The revenue model - The course was offered entirely free to students, with a fee of Rs. 500/- charged for the certificate issued by the college, if required. (But being the first batch, the participants were offered a discounted rate of Rs.100/- for the certificate). We are yet to implement this part of the plan.

Result – For the faculty and the students, this pilot study was definitely a learning experience on several levels. By the end of the semester, all the set outcomes for the course were achieved without practically any teaching in the traditional sense. The faculty and students together not only learned the concepts and principles of entrepreneurship but actually experienced the life of an entrepreneur.

Plan for the future - For the M Com batch students, **PMM2002**

Enterprise Innovation and Small Business Management course is over, but they are planning to continue the initiative of offering the course to larger segments of people with the intention of generating revenue. All the experiences gained out of the present experiment will be tremendously useful in its future conduct.

Benefits gained by the students:

- Application of management principles in real life, which otherwise would have been limited to theoretical knowledge from textbooks.
- Practical experience of constantly collaborating with the college authorities, faculty, participating students, etc
- Hands-on experience of effectively developing and implementing a business plan.
- Undergoing the stress and struggles of an actual business, thus learning from doing to better appreciating the life of an entrepreneur.
- Acquiring skills of multitasking as they had to concentrate on the studies of all other courses too, publish papers in Scopus

and UGC Care listed journals (another practice of the Department).

- Development of alternative business ideas generated in the process, which provided options to choose, if they want to venture into a business of their own.
- Greater teamwork, especially in the context of Covid-19, where physical meetings were not possible. Some of them met each other for the first time after months of working together on this project. The enthusiasm of the students proved that 'distance' and being 'strangers' were not a hindrance if they were enthused by an idea.
- All these activities were in connection with one of the several courses for MCom, with the students involved in other initiatives too – e.g. these very students were resource persons in a webinar, 'Research for Business Students'.

Faculty experience – As faculty we are well pleased that our visualisation of a plan, without resorting to traditional teaching methods had a successful outcome. There were at least two situations where we felt like we were

losing:

- In the initial stage, when the students were extremely sceptical about the whole concept.
- At the point where the students were unable to and lacked confidence to invest the minimum amount of capital. As faculty, we offered to take up a 40 per cent share in the project, but the students were still not convinced (each student had to invest only less than five per cent in the plan).

The new proposal to offer a course, making use of all the resources mobilised (non-financial) was a breakthrough. When finally, the semester-end examinations came around, more than the students, it was we – the faculty - who were more concerned about it.

The results in terms of grades scored, however, showed that there was no significant difference between the students who underwent the practical lab and those who only had theoretical learning. It is unfortunate that there is no system of examination for this course that measures the acquisition of practical knowledge, experience and skills.

A word of gratitude. As faculty members we are extremely grateful to the batch of students who were actively involved in the endeavour, all the faculty members who encouraged and supported the efforts, and the support and encouragement extended by the authorities of Marian College, especially the Principal.

The culture of Marian which always supports innovation, initiative and industriousness is something that has helped it to become a notable presence in the Higher Education segment in India, in its rather short span of 25 years' existence.

SAMPLE QUESTIONS

CO1: Understand the concepts and framework of small business enterprises.

BLOG CONTENT WRITING
BUSINESS -

A professional content writer's skills are in demand. Business blogging and content marketing are effective methods to enhance website viewing. One can work as a freelance content writer or blog writer for companies. The more active you are on social media, the more likely your followers will be to recommend your content.

Successful content writers are active, public and friendly.

- Investment required- Up to Rs 3 Lakhs
- Suitability- Persons with great writing skills and good command over the language.
- Monthly margin- 10-15%

A. Suggest the type of enterprise that a person can register under the new MSME scheme 2020, and say why.

Marks: 2 weight

B. Identify the scope of business in the area of online blog content writing business.

Marks: 4 weight

Answer key:

- A. Micro enterprises –Investment must be less than 1 Cr, and annual turnover less than 5 Cr.
- B. Scope of online blog content writing business information gathering and research on a particular topic
1. A content writer could write for business blogs, websites,

corporate communication, PR articles

2. Customized content requirements
3. Generating fresh content for websites
4. Can serve as copywriters, proofreaders, academic writers

CO2: Familiarized with managerial aspects of small business

Ms Maria has just completed MBA from a reputed Management Institute, and has been offered a job in an MNC with an attractive salary package. However, she has been in a dilemma as to whether to accept the offer or to start a venture of her own. It was her dream from childhood to start a business and become a successful business woman.

However, organizing the capital, running around for getting various mandatory clearances and arranging finances have been an area of concern for her whenever she thought of setting up a business on her own. Her parents have been advising her to accept the job as it offers the comfort of a secure job with no major uncertainties. There were suggestions that the pressure of handling a business

on her own would be high, and being a lady, she would find it tough to move on. However, from the day of her campus interview she had been feeling that she was destined to do bigger things in life. She had consulted some professors and visited some successful business women.

After much deliberation and thought, she decided not to accept the job offer and, instead, planned an e-business venture of her own. She decided to start a mini cafe with the USP of traditional and homely taste. Most of the recipes were decided by her grandmother. The cafe which started as a small outlet with no seating capacity became popular within a short span of time. She was very particular about maintaining the quality and taste of the products, and since it was guided by her grandmother, the traditional taste could be maintained.

The fact that they prepared the items at home, the incidental cost due to intermediaries could be saved. Thus, she could maintain the quality and the price. Soon the business became a success. However, many people in the vicinity got inspired by the idea and started trying the same business model. This led to a stiff competition. She has realized that the profits from

the business are decreasing due to the reduced volume of sales. She is now in a dilemma as to whether to increase the price of products at the risk of losing some customers to her competitors who may sell them cheaper, or to keep the price steady at the risk of incurring loss.

- A. Does Ms Maria possess the major qualities that are required to become a successful entrepreneur?

Marks: 3 Weight

- B. Explain what strategies she should adopt to sustain her business in the market in the light of the stiff competition she started to face?

Marks: 3 Weight

Answer Key:

- A. **Major qualities required to become a successful entrepreneur (3 weight)**

1. Creativity
2. Passion
3. Motivation
4. Product or service knowledge
5. Self-confidence
6. Optimism

7. Vision
8. Goal mindset
9. Risk-taking
10. Decision-making
11. Money management
12. Adaptability and the level of innovation

2. **Strategies adopted to sustain in the market in view of stiff competition (3 weight)**

1. New level of innovation
2. Diversification
3. Expansion of existing business
4. Differentiation of the product
5. Targeting of new market

- CO3: Apply theoretical knowledge in the setting up of and management of small business**

Mr Shone is a person who is doing his CMA studies and specializes in the field of GST. He wants to start a consulting enterprise with the help of his friends. His friends agreed to share the capital and the responsibilities associated with the firm.

- A. Which type of enterprise is suitable to start under the new MSME Act in this case, and why? Suggest the possible schemes under

MSME, since Mr Shone wants to avail himself of a loan of Rs 3 Lakhs.

Marks: 2 weight

- B. Analyze the above-mentioned case and advise him about the procedures involved in starting an enterprise in the field of Consulting.

Marks: 4 weight

Answer Key:

- A. **Micro (2 weight)**

Investment less than 1 Cr
Annual turnover less than 5 Cr

Small

Less than 10 Cr
Less than 50 Cr

Medium

Less than 50 Cr
Less than 250 Cr

- B. **Procedure for starting MSME (4 weight)**

1. Selection of a project
2. Selection of the product or service
3. Selection of the location
4. Project feasibility study
5. Preparation of the project

- profile
6. Selection of form ownership
 7. Registration
 8. Clearance from specific departments
 9. Arrangement of infrastructure
 10. Applying for obtaining finance
 11. Implementation of the project and obtaining final clearances

MSME loan is under the Kishore Scheme

Loan amount – Rs 50,000 to Rs 5,00,000

CO4: Formulate and implement strategies for sustained growth of small business

Ripple Tea is a famous tea manufacturing company. In order to increase its sales and profit, it is planning to collaborate with Apple Valley Tea. It is also planning to enter into garment manufacturing so that its business will flourish and earn more profit.

- A. Analyze the above-mentioned caselet in the strategic point of view.

Marks: 3 weight

- B. Is this an appropriate option to increase the company’s sales and earn more profit? Justify your answer.

Marks: 3 weight

Answer Key:

- A. In the above-mentioned caselet, Ripple Tea, to increase its sales and profit, is planning to adopt various growth strategies. It is planning to collaborate with Apple Valley Tea. The growth strategy adopted in this case is merger. It is also planning to enter into the garment manufacturing business. The strategy adopted here is conglomerate diversification. Other possible answers are product development, market expansion, etc.
- B. Yes, here the company has adopted various growth strategies to increase their sales and profit.

CO5: Design innovative business models on existing and emerging business areas.

Dr Chackochan J. Njavallil is Associate Professor, Research and PG Department of Commerce

Ms Neethu Anil is Assistant Professor, Research and PG Department of Commerce

Ravi is doing postgraduation in Hospitality Management. He is planning to start a Hospitality business in his beautiful village in Ramakalmed.

As a nodal officer of The Innovation and Entrepreneurship Development Centre (IEDC), help him to prepare a business plan. Hint: Prepare a business plan related to the Hospitality business, including all the components.

Marks:6 weight

Answer Key:

Business Plan Content

- Introductory Page
- Executive Summary
- Industry Analysis
- Description of Venture
- Production Plan
- Operation Plan
- Marketing Plan
- Organizational Plan
- Assessment of Risk Financial Plan

“



“Why is an A or B better than a C or D? Aren't all letters equal in the eyes of God?”

OBE IN HUMAN RESOURCE MANAGEMENT: AN EVOLUTIONARY TEACHING EXPERIENCE



Dr Ajimon George
ajimon.george@mariancollege.org
+91 9446919482

Dr Shinta Sebastian
shinta.sebastian@mariancollege.org
+91 8848467840, +91 9746353274

“The change was challenging to students and teachers; it was an opportunity to elevate education to a new realm where students are enriched with curiosity, competence and confidence.”

In the academic year 2020-2021, Marian College Kuttikkanam decided to adopt the system of Outcome Based Education, with the aim of equipping students for the new age of postmodernism. A closer understanding of the implementation, the responsiveness of students and the overall effectiveness can be gained as we observe the Outcome Based Classroom for the subject ‘Human Resource Management’, one of the courses included in the Master of Commerce (MCom) programme in the first semester.

For a teacher, the joyous journey of learning never ends. In order to reap the best results from this new system, we underwent vigorous training and preparation to revise the syllabus, the methodology of teaching and the examination pattern. Under the system of Outcome Based Education, specific outcomes were set for each module and various teaching methods were used to attain each Course Outcome (CO). This helps to overcome the challenge of helping the minds of students to transition from the traditional mugging up of facts to the practical application of knowledge. Students need to be accustomed with developing answers based on situations at hand, rather than on mere facts.

We hope that giving ample time and a comfortable learning environment will aid this transition.

Owing to the pandemic, the first stage of OBE was implemented through an online platform. We took due care and diligence in familiarising the students with the new system as well as the novelty of a digital classroom. The subject ‘Human Resource Management’ was introduced through orientation activities in the comfort of e-classrooms. The students were soon well-acquainted with the subject as well as the OBE system.

We introduced the flipped classroom approach, which saw the reversal of roles from a traditional classroom setting. The students, from being passive observers, took on the roles of active learners and peer teachers, while the teacher moved from the traditional role of lecturer to mentor. Imparting knowledge transformed from being an educational system to a learning experience.

Instead of the standard classroom approach of assigning a single textbook, students were provided with access to credible e-resources like e-journals, textbooks, research publications, etc. This persuaded students to explore

OBE: Facilitates student centric learning through

- Flipped classrooms
- E-resources
- Group discussions
- Analyzing caselets
- Role plays
- Powerpoint presentations
- Video presentations
- Team building exercises
- Peer evaluation
- Mentoring

world class reference materials and inculcated enjoyable reading habits, prompting a curious mind. Virtual aids in the form of videos and Power-Point presentations were generously used for learning each topic.

Students were also encouraged to share real life experiences, observations and ideas which helped to increase awareness of the surrounding world. They were divided into groups, and tasks like seminars, group discussions and presentations, etc. were assigned to them. This also helped the mentor provide personal attention to students and teams. An improvement in soft skills, teamwork and learning spirit, while at the same time preserving the individuality of each student, was visible.

With regards to the receding pandemic, the next stage was implemented as offline classrooms on the campus. Students were assigned more interactive sessions, where they would analyse real life situations and derive possible solutions. They were also given the opportunity to study caselets which gave insight into how to function in a real organisation. Students were assessed through examinations conducted with the help of questions framed based on situations

corresponding to each outcome. For example,

CO: Apply scientific techniques for planning, recruitment, selection and training of human resources.

Question: Recruitment from internal sources is the most reliable source for small businesses because the cost factor involved in it is less when compared to that of external sources. The Human Resource Manager of Grant Thornton, Ms Sylvia Tadore who is the product of the prestigious Trinity College, Dublin, proposes that the cost involved can be minimized and it is economical while considering the quality of candidates who are selected from external sources. Imagine a situation where your small start-up software company is in need of four employees for various positions like Software Tester, UI Designer, Data Analyst and App Developer. What all sources would you rely on for the recruitment of candidates?

Another important method adopted was role playing. Students were asked to create a hypothetical organisation of their choice and enact different scenarios. Creativity and innovation were seen at their finest as students performed, recorded and presented

role plays in attractive videos.

Regular meetings were held as teams and as a class to discuss progress, analyse performance and raise concerns. The mentor constantly voiced support, provided guidance, regularly conducted an evaluation of performance and encouraged self and peer evaluation of individuals and teams. This boosted positivity and healthy criticism among students and served as a bonding experience. But most importantly, the strategy that proved to be the most promising was that of an open forum. The mentor provided a space for students to contribute to their own education by encouraging them to explore innovations around them and to propose new ideas to the class. This helped students to find enjoyment and a sense of belongingness.

As evident from these words, our department witnessed a change in the very attitude of students towards education; they have now become active participants in the learning experience which is perhaps the greatest indicator of the efficiency of the OBE system. The students' positive responses to OBE is reflected in the visible change in their activities. Their involvement in co-curriculars, con-

fidence in public speaking and team building and problem solving skills has increased tremendously. They now willingly participate with enthusiasm, vigour and curiosity.

As teachers, we are proud to be witnesses to this evolution in education. We strongly believe that the future will be much more exciting and competitive in the hands of these students emerging from OBE. The vibrant classroom is now a lively playground for the teacher, and we are eager to explore more opportunities under OBE.

Dr Ajimon George is Associate Professor and Vice Principal. Member of the Board of Studies - Commerce (UG) and Research Guide in MG University. Member Secretary of Marian Academic Council. Author of textbooks for BCom, BBA Programmes. Has 22 years of teaching experience.

Dr Shinta Sebastian is Assistant Professor, Research and PG Department of Commerce. Has five years of teaching experience.

REDEVELOPED LEARNING PROCESS



Mr Jelit Mathews Joseph
jelit.mathews@mariancollege.org
+91 8330830008

Education aims at creating a teaching and learning environment that would bring about the desired changes in learners to be more knowledgeable, develop better skills and influence their attitudes and values positively. The essence of teaching and learning is to plan teaching contents and strategies, and ascertain the extent to which learners have acquired the intended competencies. Therefore, producing a 21st century graduate requires a redeveloped and updated learning process.

Outcome Based Education (OBE) is an educational system that focuses primarily on student participation so as to enhance the student's performance. Student centered learning is a method of learning that keeps the learner in the center. In this method there is a shift of focus from the academic teaching staff to the learner. It is an effective means to measure whether the teaching objectives of the course have been achieved.

The core of OBE is to establish processes based on output, establish training objectives based on future career needs and development expectations of students and carry

Student involvement in the classroom is a key part of OBE. Increased student involvement allows students to feel responsible for their own learning, and they should learn more through this individual learning.

out continuous progress and growth driven by teaching evaluation. Student involvement in the classroom is a key part of OBE. Students are to do their own learning so that they gain a full understanding of the material. Increased student involvement allows students to feel responsible for their own learning, and they should learn more through this individual learning.

Detailed, well-written learning outcomes or competence descriptors allow both teaching staff and learners to have a clear picture of the behavior that is expected of the latter at the end of a course. This can help to provide direction and can also help to guard against overreliance on a particular staff member or an idiosyncratic interpretation of the syllabus. It is, of course, strongly recommended that the students should always be included in this prior-knowledge of objectives.

All too often in the past, their only clue as to what was required of them came from a study of previous exam papers - a situation that is difficult to defend, since students have enough problems to face without being

involved in academic 'guessing games'.

Hence, we see that Outcome Based Education allows students to clearly apply what they have learned in their course, and know how it helps them use their education to tackle problems when it comes to their career.

From my experience, the suggestion is to improve OBE to set the curriculum according to industry standards. Teachers should inspire and encourage the students so that they can maintain enthusiasm and take initiative in learning, raise their confidence level and improve their communication as well as presentation skills. The teacher must stimulate the consciousness of students by optimizing the teaching structure, teaching methods and creating a holistic teaching environment.

Mr Jelit Mathews Joseph is Assistant Professor, Research and PG Department of Commerce

A NEW VISION TO A BETTER FUTURE



Ms Jomol Mathew
jomol.20ubm337@mariancollege.org
+91 9400171373

The article narrates the experience of the first year B Com students of Marian College regarding Outcome Based Education. It also shares some examples of the benefits of Outcome Based Education achieved by the students.



For the things we have to learn before we can do them, we learn by doing them.

Aristotle

I am here to discuss the benefits acquired from Outcome Based Education (OBE) at Marian College Kuttikkanam.

The first semester classes which started from 15 September 2020, had something special waiting for the students. It marked the commencement of Outcome Based Education at Marian College.

In the beginning, most of us had a fear of the new mode of education because it was completely unfamiliar to us.

The classes were so interesting as we were exploring ourselves through the subjects and new topics. Each day we had a task assigned from a particular topic. All these topics were related to

The real time experiences of students regarding Outcome Based Education and the benefits acquired by them through the same are recollected here.

the real world which made us eager to find more about them. Our teachers were always with us, answering our queries and supporting us in our six month journey.

Earlier, we used to mug up things for the exam, which was of no use afterwards. But, thanks to the new educational system, it made us clearly understand what we learned. Marian campus also provides various opportunities to apply these lessons through various internships and programs.

Example: I have studied marketing in Business Management classes. I was able to apply that knowledge when I worked as a sales marketing intern at 'My Captain'.

There are many benefits that we acquired from the OBE mode. We were asked to prepare projects, assignments, case-lets, Film-clippings, etc. which helped us to always be a part of the classroom, and made the learning process very interesting. Each of us had the opportunity to present our own views about the topics that were discussed with our faculty who gave us suggestions and corrections, which

made us perfect.

Example: We were given a group activity to introduce a new product and design its 4Ps. We divided the topic among us, clearly studied it, researched and designed a new product and the 4Ps and presented it before the entire class. This activity helped us to understand the 4Ps and use them as if in a real market.

The new system freed the students from the old technique of mugging up. We were not at all asked to mug up things. This also made the process of learning easier and simpler. The teachers ensured that we met the targets through continuous assessments and semester exams. After each exam, teachers gave us feedback, and pointed out areas for improvement.

In short, the outcome-based exam pattern helps us in achieving goals and makes us ready for the corporate world.

Ms Jomol Mathew is a first year B Com student at Marian College Kuttikkanam Autonomous.

NEXT GENERATION LEARNING THROUGH OBE



Ms Megha Susan Rajesh
megha.20pmm313@mariancollege.org
+91 7034933076

Ms Treesa Siby Joseph
treesa.20pmm226@mariancollege.org
+91 9902471412

Changes are always for the best, and the change through Outcome Based Education has impacted the learners in the best way.

The introduction of Outcome Based Education (OBE) in the curriculum is a big step for Marian College towards modern education. This method has been in use for over a decade and has shown great results and impact on the students. In contrast to conventional teaching methods where teaching is the most important factor, Outcome Based Education focuses on how well the students learn. The contributions of this method are impeccable that it completely changes the way a student approaches learning.

While the traditional system focuses on what is taught, OBE places emphasis on what is learned, and this distinction is very important. The latter being a student centric model which involves the restructuring of curriculum and assessment practices, reflects the achievement of high-order learning as opposed to the traditional system of learning. Designing effective teaching techniques is the foundation for providing quality education to students in the most efficient way possible. Our faculties were given training by the college administration prior to the introduction and implementation of Outcome Based Education, the aim of which was to provide students with a comprehen-

sive view and a better learning experience in order to foster a sense of clarity and overall skill development. The methods used to incorporate the Outcome Based Education model in each subject of the curriculum proved to be effective in achieving the goal of student centered learning. The college's trained faculty came up with innovative ways to guide students through this process. The professors had a simple plan regarding how to lead the students in this course.

The first and most important step in implementing the Outcome Based Education programme was by introducing it to the students in the most comprehensible way possible. This initial orientation helped students to become aware of the academic standards that they needed to achieve.

Enterprises, Innovations and Small Business Management:

Diverse kinds of teaching techniques were used which included the following:

1. Every student was assigned to create a business plan which is a strategic tool for entrepreneurs. PowerPoint Presentations were used for the preparation and pre-

OBE has changed the perspective of learning through the following:

- Business plan
- Caselet formation and solving
- E-resources
- Real life examples
- Group discussions
- Role plays
- Seminars
- Presentations
- Soft skill development
- Examinations
- Training sessions

2. Activities undertaken on a regular basis included case study analysis and recommendation of appropriate solutions to issues that could arise in a real-life situation in the field of entrepreneurship.
3. Caselet formation by students.
4. Encouraging the use of reference books and e-resources for improved learning.
5. Promoting innovative thinking and creativity in all tasks.

Advanced Corporate Accounts:

The focus was on ensuring student involvement and greater participation by introducing the following techniques:

1. Conducting question and answer sessions on previously discussed topics to keep students up to date.
2. Providing a plethora of practice questions with the aim of deepening their understanding and increasing their pace.
3. As instructional tools, PowerPoint presentations and course texts were used.
4. Important notes were dictated in class, and notebook completion was considered an important

criterion for grading.

5. Preparation of teaching notes by students was encouraged.

Quantitative Techniques:

Conceptual clarity on the subject was ensured by implementing the following techniques:

1. Gaining an understanding of real-world applications of quantitative techniques through assignments and class discussions.
2. Practising problem solving by using various quantitative approaches.

Research Methodology:

Various student centric approaches were employed with the objective of changing the way students approached issues.

1. The subject was taught using several real life examples which made it easier for the students to understand the topic at hand.
2. Practical information was put to use by requiring students to select a project topic from any field of interest, and by developing appropriate objectives and hypotheses.

3. In order to ensure a better understanding, learning exercises were used so that the students would become acquainted with many of the key concepts of Research Methodology. Students were given a list of terms and were expected to grasp the basic meanings with examples and real world applications.

Human Resource Management:

The flipped classroom method was used where the students took over the teaching role and used teaching materials given by the subject instructor. From the very beginning of the courses, students were divided into groups and were expected to complete all of the tasks assigned to them as a group. They held classes, seminars and presentations to help the teacher's idea get off the ground. They were able to refer to a variety of books, journals and documents. As a result of this, it helped them gain a deeper understanding of the topics.

At the end of each session, there were discussions in which students added up more points and solved real life problems. The students were advised to use the following approaches to complete the task at hand:

1. Role play- The real life managerial situations were role played by the students and videos were presented. This activity offered them practical thinking and understanding. Till then, they had only studied the situations, but now they were practically applying what they learnt.
2. Visual aids- Students used presentations and maps to pique the attention of learners and quickly illustrate concepts.
3. Case analysis-. All the concepts and theories in the course have some practical approach. So, in order to build the problem solving skill, caselets were solved individually and in groups. These discussions helped in realising the different aspects or points of view of different persons. This positively widened the thinking level of the students. Students also prepared caselets themselves that helped them much more in thinking than it usually does in solving a situation.

Continuous Assessments and End Semester Examination:

The results and impact of the Outcome Based Education programme was evaluated with the help of three

continuous assessment tests and the semester end examination which was particularly designed with the purpose of testing the students' ability to apply their conceptual understanding and practical knowledge of the subject.

Soft Skill Development:

Group discussions on relevant topics pertaining to various fields of information were conducted to develop students' critical thinking and analytical skills. The students were divided into groups and assigned with different topics for the discussion. Students actively engaged themselves in the discussions relating to their respective topics.

Current affairs and Proficiency in English:

To improve the students' ability to keep up to date with everything important happening in the world, they were divided into groups and regularly made to prepare and present reports on current affairs pertaining to a particular time frame. The students were given the option of selecting the mode of presentation that was most

convenient for them. The improvement of English speaking skills was prioritised, and as a result, various exercises were carried out in the class to promote public speaking.

Viva Voce:

It was conducted as an integral part of assessment for all the subjects. The viva was carried out by the Head of the Department, Department faculties and an external faculty. The viva evaluated the confidence level of the students and the accuracy and pace with which it was executed by them.

Other Activities:

The Department organised a variety of other programmes for its students to help them develop their skills such as quantitative aptitude courses, bank coaching, outbound training sessions and so on.

Students were assessed at the end of the semester based on their cumulative results in all subjects and other tasks, taking into account the level of realistic approach they had taken under this newly implemented curriculum of outcome based learning.

All of these approaches proved to be

extremely beneficial in fostering an environment of meaningful learning in which students took on duties and did their very best to complete the roles assigned them by the subject teacher with enthusiasm and professionalism.

The Outcome Based Education policy has instilled in students the ability to bring theoretical knowledge into practice in order to solve problems in real life scenarios. It has also inspired students to be innovative and has raised their self-confidence to a whole new level. It has assisted them in understanding the significance of teamwork as well as the need to improve strong communication skills. The change was definitely a challenge to both the students and the teachers, as it was new. But that gave us opportunities to implement the approach together by finding out creative methods to achieve the results.

The immense support from the faculty clearly filled confidence in us that helped us in successfully moving forward with the roles that we had to perform. The best result of this approach that I could see is that OBE

Ms Megha Susan Rajesh and **Ms Treesa Siby Joseph** are vibrant students currently pursuing studies under the Department of M Com PGDM

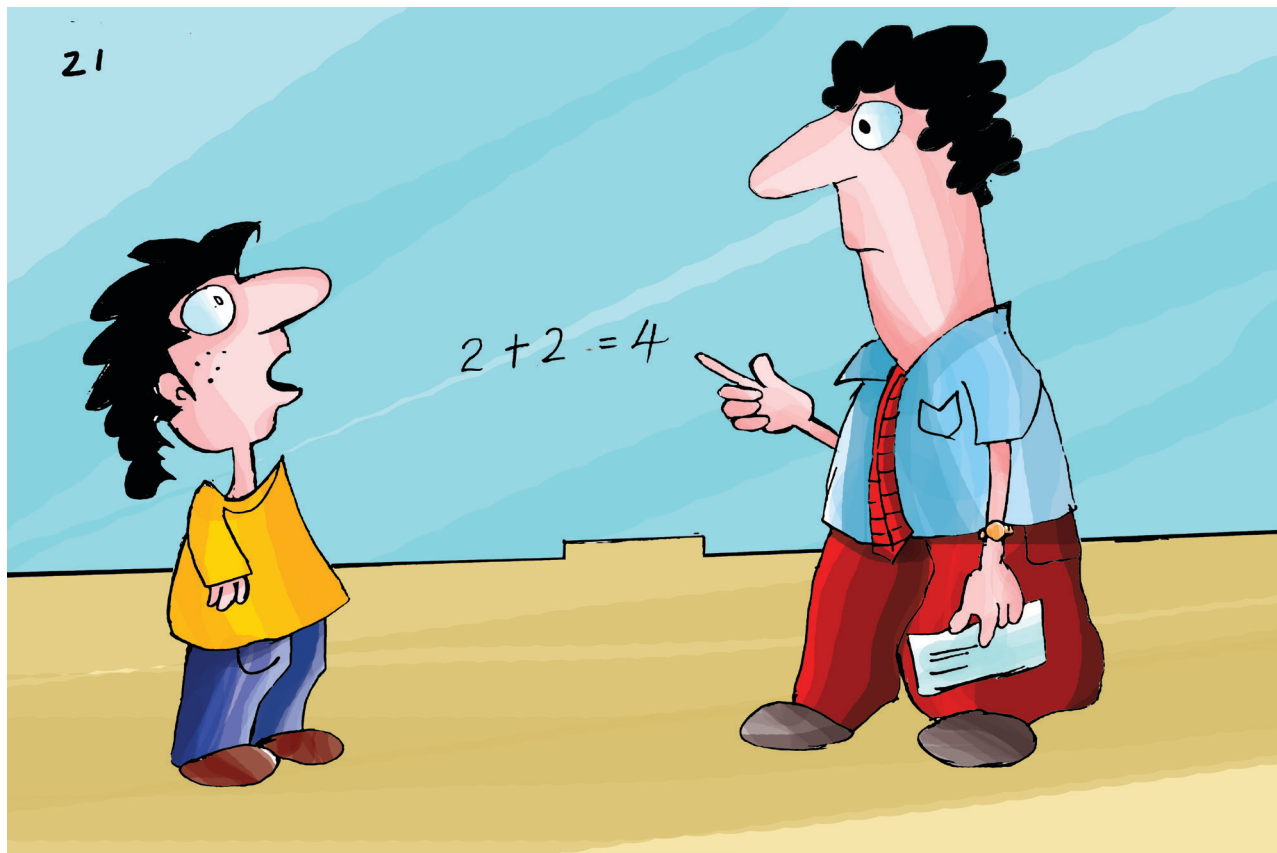
transformed 'studying' into 'learning'. We are able to connect the real life situations or the practicality of what we study, through the method. Also, the methods directed to this practical approach make us learn things more deeply – the benefit of flipped classrooms and other creative tools like role plays and discussions. The end result of all these is the improved practical thinking of each student, which was not a focus earlier.

We used to mug up anything we were told to learn, which made it mere studying, just so the information would be somewhere in our brain.

“Tell me and I forget.
Teach me and I may remember.
Involve me and I learn.”
Benjamin Franklin

This is also what great minds say. So, as the students get involved in the learning process and not merely listen to what the teacher says, the Outcome Based Education will surely change their perspective of learning, which in turn would certainly contribute to the quality of their life.

“



“How can I trust your information.
When you’re using such outdated technology?”

A CLASSROOM UNDER OBE



Ms Salini Mathew
salini.20pmm315@mariancollege.org
+91 9995 527449

Ms Simran Raju
simran.20pmm319@mariancollege.org
+91 7902 213798

The OBE system was completely new to us. Our experiences, in terms of how we accepted it, the challenges we faced, and how it proved to be of great advantage to us, have been shared in this article.

It was with much eagerness and anticipation that we walked the steps to Marian, for what would be the very last stop in our eventful journey of institutional learning. We deemed the chance to study under the Department of MCom PGDM, a gem of an opportunity, and wanted to make the most of it before being ushered into the hustle of a corporate world.

Our introduction to the Outcome Based Education system was through various online orientation classes, where we were given an outline on how our five core courses would be taught by our teachers. It was all so new, especially since we would have to first unlearn years of cramming and exam intensive studying that had been drilled into us.

Our teachers, sensing our inhibitions, patiently guided us through a new world of interactive sessions, peer teaching, presentations and problem solving activities - all to the rhythm of practical application of knowledge in place of mere factual learning.

For the first semester, we were assigned five Core courses, Viva Voce and two Non- Credit courses: Soft Skill Development for Professional

Excellence and Current Affairs and Proficiency in English. These were complemented by activities under Continuous Assessment for Research Skills and Continuous Assessment for Deepening Learning. We were also awarded 'activity points' for involvement in extracurricular activities of all sorts. Each course was designed based on the set course outcomes, and we were able to understand how effectively each outcome was achieved by the end of the semester.

To facilitate e-learning in the first stage, we were each allotted a personal account and e-space, where we were individually assessed. Quizzes and tests were conducted on a regular basis to analyse our progress. We were also provided with access to e-libraries and other online resources like visual aids such as videos and PowerPoint presentations. The MOODLE platform allowed us to track our progress and clear doubts.

The course, 'Advanced Corporate Accounting', was taught in a most creative manner. OBE was implemented through a series of discussions and Q & A sessions to strengthen our foundation in

This article unfolds our perspectives on:

- Implementation of OBE under different courses
- Setting and achieving of Course Outcomes
- Challenges and benefits

Accounting with the help of PowerPoint presentations and advanced study materials. We were introduced to questions specifically framed to give us an outlook on how the various aspects of Corporate Accounting would be applied in different firms. Practical problems that were replicates of real-life case studies were also used. OBE served as a platform for us to equip ourselves with a comprehensive understanding of Advanced Accounting.

‘Enterprises, Innovations and Small Business Management’, brought OBE to life by taking us on a very exciting journey to explore and create our own business ideas. We were encouraged to formulate business plans, discuss possible challenges and develop elaborate growth strategies. This motivated many of us to venture into small scale businesses of our own.

Yet another OBE strategy was adopted in the form of the flipped classroom approach for the course ‘Human Resource Management’. We actively participated in teaching our peers and brought to life various dimensions of managing human capital through role plays of companies of our

imagination. Live discussions, seminars, video presentations and preparation of caselets and solutions - all contributed to the effective moulding of the HR Manager in us.

The course ‘Research Methodology’ was enriched with real life illustrations of the numerous concepts of research. Students were made to research everyday problems and constantly encouraged to share ideas and observations. We were able to formulate real life research problems and carry out the research process, all while developing clarity and deepening our knowledge regarding Research Methodology.

For the course ‘Quantitative Techniques’, OBE was implemented by presenting the students with an opportunity to solve problems based on their application in the field of Commerce. We also applied different techniques to data very similar to that of real firms. This instilled in us a sense of confidence to use quantitative tools in the right manner.

A Viva Voce examination which was conducted in the nature of an interview enabled us to develop

conceptual clarity, and our ability to derive practical solutions was enhanced manifold.

Internal evaluation of our progress was made through Continuous Assessment Examinations. Semester End Examinations analysed the course outcomes achieved by each student. Daily discussions regarding current affairs and public speaking exercises of different forms as well as group discussions were conducted under the non-credit courses. Innovative teaching aids, PowerPoint presentations, preparation of teaching notes and open discussions were an integral part of every course, both in online and offline classes.

Despite our reluctance to come out of our shell of traditional learning methods, our teachers patiently and skilfully guided us through the new system of OBE. Although we initially faced difficulties due to this change, we gradually became accustomed to the same. We experienced tremendous results as we were able to polish our soft skills as well as develop a better subject knowledge and deeper learning. Most importantly, we were able to improve our employability and nurture our

entrepreneurial and managerial skills.

The driving force behind the success of OBE in our Department can be attributed to the perseverance and commitment exhibited by our dear teachers. We witnessed each and every one of our talented teachers taking on spirited roles as tutor, trainer, researcher, manager, entrepreneur, professional accountant and, most importantly, innovator.

We are grateful to be part of the OBE system and hope to grow to greater heights under the watchful eyes of our inspiring teachers.

“Give a man a fish and you will feed him for a day. Teach a man to fish and you will feed him for a lifetime”. These words of wisdom reverberate with truth, as we, the students of the Department of MCom PGDM, strongly believe that when we descend the halls of Marian, we will be ready to face the rising challenges and demands of the world with confidence and vigour and a flair of individuality.

Ms Salini Mathew and **Ms Simran Raju** are currently pursuing studies under the Department of M Com PGDM

THE EXPERIENCE OF TEAM GLADIATORS REGARDING OBE

The article narrates
the experience of
the I MCom Aided
students with
regard to Outcome
Based Education



Ms Milcah Elizabeth Shibu
milcah.20pmm114@mariancollege.org
+91 7902410889

We, a group of youngsters studying in the youngest autonomous college in Kerala - Marian College Kuttikkanam - have named ourselves 'Gladiators'. Our M Com program under the supervision of our instructors, was truly dazzling. Since we are the smallest class of Marian with fourteen students, nine girls and five boys, it was an effortless task to find harmony and maintain unity among us. It is through this harmony and unity that the entire class hold hands together and grow together.

We are one of the first PG batches of Marian reaping the benefits of Outcome Based Education. At first, we had no idea as to what was going to happen. But the instructions and support received from the faculties removed our doubts. Besides, the togetherness of our class made it possible to adapt ourselves to any changes that would be made in the syllabus.

If I wished to share a wonderful experience regarding Outcome Based education, then it would be in connection with one of our courses 'Enterprises, Innovation and Small Business Management'. When this course was introduced to us, we felt it

was something very new as it did not include anything that needed to be learned by heart from the textbooks. We were given five outcomes. Achieving these outcomes was a real challenge. Another daunting feature was that there were no textbooks available for the subject. Besides, there would be no traditional method of teaching.

Apart from studying the notes given by the teachers, we were asked to do three things:

1. Provide a certificate of completion of an online course related to entrepreneurship.
2. Prepare and publish an e-book on the subject which covers all the five modules.
3. Start a business and generate profit.

The first task was an easy one. We completed the online course and submitted the certificates. This made us more capable and serious about the importance of the subject in this entrepreneurial era.

The second task was a little tougher than the first. We divided our class into five different teams and each team worked on a module. We suc-

cessfully completed work on our book and had it published.

The third activity was the most challenging of all. We, however, were consumed by a strong desire to accomplish the task. The journey was a very difficult one as we had to cope up with the new syllabus in an online mode. After considering a lot of proposals and ideas, we decided to start a business that would support other start-ups. But we had no idea where to start these activities. After accepting and rejecting different opinions, we planned to work as an online start-up supporting agency. We gave a name to our business - 'START-UP SEVA'.

Our next task was to build a professional website for getting market acceptance for our business which required capital investment. We were not in a position to spend money on the website because of financial constraints. It was a struggling situation, and we felt like losing confidence. Various opinions arose from the members of our team, and we were doubtful as to how we would complete the semester.

Then, the breakthrough happened. Our class decided to raise the funds.

The experience
is not confined
to mere bookish
knowledge but
knowledge that
lasts a lifetime.

We offered an online certificate course 'STARTUP – A DREAM TO REALITY' for all students of the college. Announcements were made, posters were distributed, and google forms were shared for registration. There were 184 registrations. The Principal of the college inaugurated the one month course. We conducted classes through our YouTube channel and completed all the online course-related activities through the Moodle platform. 88 students completed the course and applied for their certificate. We charged a small amount for the certificate and thus generated the much needed fund.

Now, our website was created through google sites and we, then, built a professional website. This helped us in successfully completing our third activity. The motivation that was given by the faculty helped us enormously in accomplishing the assigned tasks by the end of the first semester despite the difficulties of online classes. This accomplishment made us self-sufficient and better entrepreneurs.

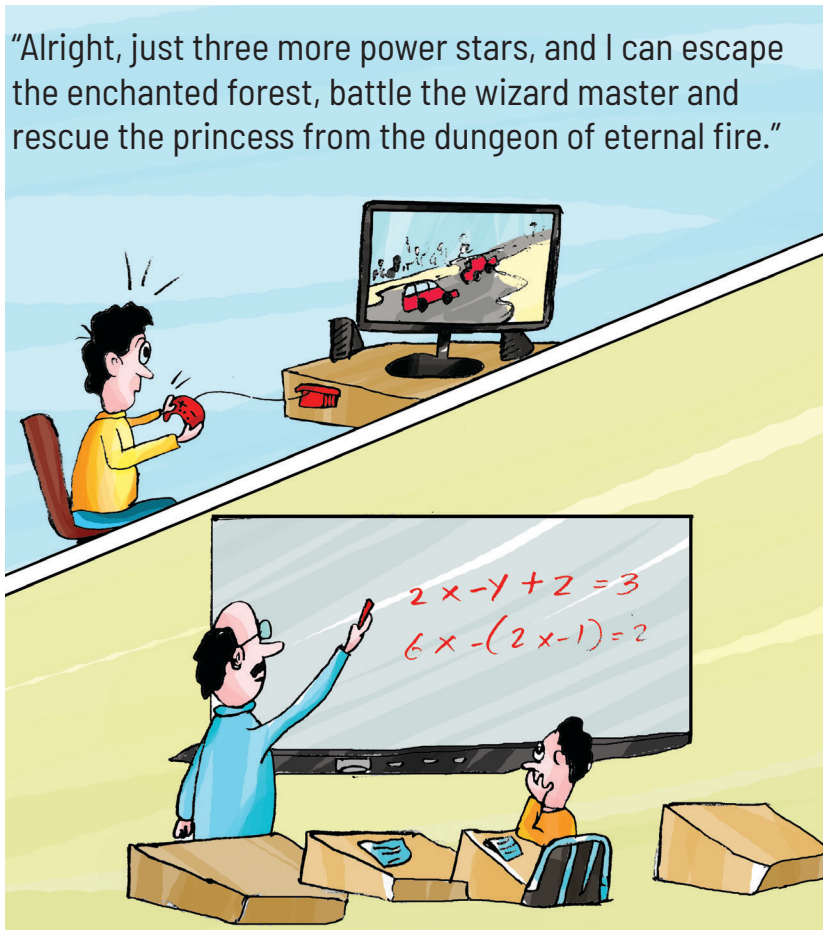
We the 1 MCom Aided students got

Ms Milcah Elizabeth Shibu is a first MCom (Aided) student of Marian College Kuttikkanam (Autonomous)

all these opportunities only because of the implementation of Outcome Based Education by the college. As a student of this wonderful batch, I am extremely grateful for the support that we got from our Department (Research and PG Department of Commerce). We could, without doubt, testify to the fact that the days at Marian were meant for our self-identification and development. The college and the facilities it offered acted as a mirror that reflected the best in us. This short period proved that nothing is impossible if you are willing and have a listening and supporting crowd, because we had one like that here who always listens, suggests, and supports. The lessons we learned from Marian in this short time are not confined to books but would last us for life.

“

“Alright, just three more power stars, and I can escape the enchanted forest, battle the wizard master and rescue the princess from the dungeon of eternal fire.”



How will this ever apply to my real life.

IMPLEMENTATION OF OUTCOME BASED LEARNING IN COMPUTER SCIENCE UG PROGRAMME - A CASE STUDY



Dr Rajimol A.
rajimol.a@mariancollege.org
+91 9447092562

Dr Juby George
juby.george@mariancollege.org
+91 9447902092

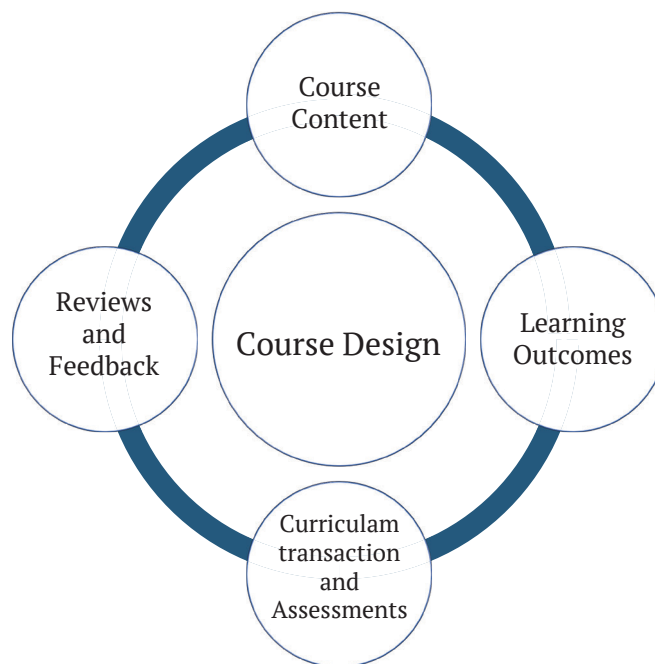
Outcome Based Education (OBE) rapidly gains attention worldwide as a systematic approach for evaluation reforms in higher educational institutions. Outcome Based Education is a student centric teaching-learning process in which course delivery and assessments are planned to achieve the stated learning outcomes. It focuses on measuring the attainment level of outcomes of students. Different assessment methodologies can be combined to assess Course Outcomes(COs) that will eventually contribute to the assessment of Programme Specific Outcomes (PSOs) and Programme Outcomes (POs).

This way, outcome based learning and evaluation ensure the attainment of institutional level Vision and Mission by its graduates. Clear understanding and articulation of the intended course outcomes facilitate the design of an effective curriculum and appropriate assessment methods to measure achievement levels, and to plan the learning process for individual students. The Program Specific Outcomes (PSOs) are road maps for describing career objectives that the graduates are intended to achieve through the Programme.

Process of transformation into OBE

Marian College initiated discussions, arranged training and conducted workshops so that the faculty would get adapted to the paradigm shift to Outcome Based Education. The University Grants Commission (UGC) had initiated the mission of improving the quality of higher education in India through its Quality Mandate in the year 2018. In the 2018

syllabus, we incorporated learning outcomes to each and every course in the Programme. The academic year 2018-2019 exposed the teaching faculty to a series of brainstorming sessions. Resource persons even from international universities were available on the campus to clarify doubts and equip the teachers. In the 2019 syllabus, we incorporated modified Outcomes and mapped Course Outcomes (COs) to



Programme Specific Outcomes (PSOs) and Programme Outcomes (POs).

The Department of Computer Applications restructured the BCA Programme in tie-up with the Tata Consultancy Services Limited (TCS) in the academic year 2020-2021. In the first semester, we had two Computer courses, viz. Operating Systems and Object Oriented Programming using C++.

In this article, we explore how ‘Outcome Based’ teaching, learning and assessment were implemented for the two courses,

1. UBC2003 Operating Systems
2. UBC2004 Object Oriented Programming using C++

Fine Tuning of Outcomes and Course Content.

The restructuring of the syllabus was done by incorporating feedback from experts in the field of Computer Science, the alumni, experts from the TCS and peer instructors.

Course1: UBC2003 Operating Systems

In the 2017 syllabus, the learning outcome was stated thus: Upon

successful completion of this course, students should be able to understand the basic concepts of Operating Systems common to most computer systems which interface the machine with the programmer. This lengthy CO was changed into a short one so that the outcome was clearer. The reframed CO was

COUBC1921.01: Acquire the basic understanding of Operating Systems.

However, in the academic year 2020-2021, the institution decided to implement the OBE in its full sense and so, we had to move to the final stage, i.e. OB evaluation. The need to make the COs measurable becomes a natural requirement in that phase. As a result, the very same outcome statement has been reframed into,

COUBC2003.01: Describe the role of Operating Systems in the working of a computer system.

Yes, now it has become simple, clearer and measurable.

Another example is,

COUBC1921.04: Analyze various memory management techniques. This statement was not complete, so

it had to be reframed.

COUBC2003.04: Analyze the techniques employed for memory management in computer systems.

Course 2: UBC2004 Object Oriented Programming using C++

Let us have a look at the new outcomes:

UBC2004 CO1: Outline the concept of Object Oriented Programming and the features of C++ Programming (M1).

Previously this outcome was defined as “Describe Programming Paradigms”. Now the outcome was revised to make it clearer and precise. It was framed based on the content of the first module (M1) which explored the details of the comparative study of Procedure Oriented Programming and Object Oriented Programming, Basic statements and features of C++ Programming.

UBC2004 CO2: Define Classes, Functions and Arrays of objects, and explain their characteristics (M2).

In the previous syllabus, it was “Define Objects and Classes”. The

revised outcome focuses more on the details of how to define Classes and Objects which is the basic step in Object Oriented Programming concepts. It again focuses on how objects can be passed as arguments and how to manage an array of objects and all features with Objects and Classes.

UBC2004 CO3: Illustrate the concepts of constructors and destructors and show how to construct two-dimensional arrays (M3).

In the previous syllabus, it was “Illustrate and use the concepts of Constructors, Destructors and type conversions in programming”. It replaced the verb ‘Understand’ with ‘Illustrate’, which necessitated that the students use different constructors appropriately and destruct those after their use.

This module also enables the students to use multidimensional arrays using C++ language.

UBC2004 CO4: Demonstrate the application of Inheritance, Pointers, Virtual Functions and Polymorphism in Programming (M4).

Through different teaching learning methodologies, students must be able

to apply the Object oriented concept specified in CO4 to solve real case scenarios.

UBC2004 CO5: Explain the organization of Files and Streams in Object Oriented Programming (M5).

The previous outcome, which was just understanding the concept of Files and Streams in Object Oriented Programming, was changed in order to equip students to organize data in files, and to use appropriate input and output streams.

The revised outcomes and course contents give a clear picture of the intended learning outcomes in Outcome Based Education.

Curriculum Transaction and Assessment

When the learning gets shifted to ‘outcome based’, definitely the way of transacting the curriculum also needs to be revisited. When a core concept is discussed, a practical situation must be created before the students and discussed.

This can automatically initiate a thinking process and lead them into an implementation level idea.

Continuous Assessment (CA)

Continuous Assessment is the key method of assessment that can be used to ensure the attainment of the required outcome. The freedom of the course facilitator in designing the evaluation pattern is very crucial.

Thanks to the institution which identified this sufficiently early and gave a certain level of freedom to the course facilitator in the continuous evaluation. For all theory courses, the evaluation method for 50% of the CA marks could be set by the facilitator. For all practical courses and projects, the CA assessment pattern could be set by the Department, and the mark is 60 out of 100.

All assessments will evaluate any one or more of the Course Outcomes which then would lead to mapping with the Programme Specific Outcomes and the Program Outcomes so that it would ultimately lead to the Vision and Mission statements of the Institution and meet the Higher Education Objectives. For the courses, the following assessment strategies were adopted which would help the students to

The process of transformation, fine tuning of Outcomes and Course content, Curriculum transaction and Assessment, Continuous Assessment and Semester end Assessment are highlighted in this article

attain different outcomes:

In these Assessment methods, after finishing each module a quiz was conducted to evaluate each outcome. Peer teaching through advanced learners was used as a tool to accommodate students from diverse streams. As students from the Biology background were not familiar with the computer fundamentals, the advanced learners were trained to help those students to attain the outcomes. As an experiment, it was decided to divide the entire 57 students into 20 groups with three students in each group. The instructor then evaluated all the groups and the level of attainment of outcomes of individual students.

After completing each module in the Programming course, the students were given tasks for analysis and error identification in the given Programmes. This process enabled the identification of the students' capability to develop computer programs, and thereby, the evaluation of intended outcomes. As another evaluation strategy, each student group was asked to prepare a video content based on the Object Oriented Programming concept. Excellent videos were developed by each group of

students demonstrating all the given concepts clearly, and the evaluation of the attainment of outcome was made by setting rubrics. Such methodology leads to not only the evaluation of course outcomes but also the assessment of PSOs and POs.

Such a method of evaluation ensures that the students automatically grab the concepts clearly and provide solutions to real world scenarios.

Semester End Examination (SEE)

Semester End Examinations are conducted using questions banks. As it was the first time that the evaluation followed the OB pattern, the college decided to go with a 'buddy' system, where each course facilitator would get a buddy.

This buddy system proved to be a boon during the framing of questions as well as during the valuation of answer scripts.

Sample Questions

In OBE, questions need to be framed in such a way as would lead students into high cognitive levels. We have to deviate from the usual blunt way of asking questions just to make the

students reproduce what they have learnt.

While developing the question bank for a course especially one which focuses on OBE, care should be taken to accommodate the entire student range. Questions need to be clear and unambiguous, and enable analytical thinking leading to implementation.

Operating Systems:

Qn 1: “Though basic functionalities are the same, different types of operating systems suit particular types of environment”. Prove that the given argument is true with at least four suitable examples illustrating how they suit different environments (CO1).

Qn 2: Protecting the user area and the OS area from a malicious program is an important security concern in any system. Illustrate a technique that the operating system adopts to check whether all memory access from a process is legal (CO1).

Qn 3: In a computing environment, there are five printers which are shared among the users.

a. Which type of semaphore is used to provide mutually exclusive

access to these printers? Justify your answer.

b. Formulate the statements for using semaphore for mutual exclusion in sharing the printers, and explain them (CO3).

Qn 4: There are two types of CPU schedulers- preemptive and non-preemptive. Which one is more suitable for the time sharing system? Substantiate your answer. (CO2)

Object Oriented Programming using C++

Qn1: Design a Class Student that contains appropriate members for storing name, roll number, age, gender and course. Write the member functions for accepting data to data members. Write a member function print () that prints the students data in a formatted manner. (CO1:3 Marks,CO2:9Marks)

Qn 2: Explain ‘Object initialization’ and implement the following:
A bookshop maintains inventory of books that are being sold. The list includes details such as author, price, publisher and stock position. Whenever a customer wants a book, the sales person inputs the title and the author, and the system searches the

list and displays whether it is available or not. If it is not, an appropriate message is displayed. If it is, then the system displays the book details and requests for the number of copies required. If the requested copies are available, the total cost of the requested copies is displayed; otherwise the message “Required copies not in stock” is displayed. (CO3)

Qn 3: A private member of a base class is not inheritable. Is it in any way possible for the object of a derived class to access the private members of the base class? If yes, how? (CO4)

Reviews and feedback

After completing the course, the feedback and reviews are also considered which will help to improve the efficacy of the OBE based teaching-learning process. While preparing question banks, feedback from the buddy instructor will help to frame questions that would evaluate outcomes directly.

Inferences and conclusion

The complete autonomy given to the course facilitator, starting from the design of outcomes, course contents,

delivery method, assessment patterns and finally the valuation, is an important requirement. Let us conclude with inferences and challenges.

Inferences

In OBE,

1. the students learn to effectively search to acquire the required information.
2. the student involvement is more.
3. everything becomes student-centric.
4. the instructor is compelled to know and understand what is really aimed by the delivery of the course.
5. open online courses of lesser difficulty level can be recommended for students as a bridge course.
6. the advanced learners can be directed to take certification courses to enrich their skillsets.

Challenges faced

In the process of the OBE implementation, instructors face numerous challenges. Well-formed outcomes are not easy to design. The selection of verbs to formulate measurable outcomes was confusing. Another challenge the educator faced was to

deal with diverse students and different teaching and evaluation methodologies so as to build a positive learning environment.

The online mode of teaching and the time limitations were other challenges faced by the instructor as well as the students. The different modes of assessment by the instructors take extra time to evaluate all the students' outcomes either by sharing the resource or downloading the content and evaluating all outcomes, and helping the students to clarify their doubts.

Another challenge faced by the instructor was the lack of clarity in the relation between the verb and the taxonomy levels while setting question banks to evaluate the outcomes.

The OBE helps students to focus on clearly defined course outcomes, and they are clear as to what they are

able to do after the completion of the course. This makes learning more student centric.

In OBE, instead of focusing on what to teach, the instructors need to think from the learners' perspectives, and focus on how they can help the learners achieve the intended outcomes in an effective and efficient manner.

Dr Rajimol A. is Associate Professor, Dept of Computer Applications. Member of the Marian Academic Council and various Boards of Studies in the Mahatma Gandhi University. Has 25 years of teaching experience.

Dr Juby George is Assistant Professor, Dept of Computer Applications, Member of the Board of Studies at Fathima Matha National College, Kollam, Question paper setter in the Kerala University. Has 17 years of teaching experience.

“

“Algebra will be useful to you later in life
because it teaches you shut up and accept things that seem pointless and stupid.”



OBE DIARY: OUR EXPERIMENTS FROM THE KNOWN TO THE UNKNOWN



Dr Mendus Jacob
mcaudirector@mariancollege.org
+91 9447053716

Making students demonstrate that they “know and are able to do” on completion of the course and the Program, is the biggest advantage we got out of OBE.

“Every mountain top is within reach if we just keep climbing,” is a popular saying and a reality in the frame of the OBE implementation. The journey to scale the heights of OBE started with the first step of knowing what OBE really means. A lot of philosophical, psychological and sociological perspectives have created a cloud of ambiguity which really covered the real understanding of the functional dimensions of OBE. These confusions have really triggered the spirit to drill deep into the various perspectives of OBE and build a realistic model compatible for the realization of our departmental outcome, “Design an OBE based curriculum at the MCA Department of Marian College Kuttikkanam”.

Contextually, I would like to mention the theme of a cartoon which came to my notice those days. The cartoon sketch portrays the scenario of a music school where a teacher was deputed to teach students the various notes of music. After a period, the teacher returns to the person who had assigned him the duty and tells him that he has successfully completed the task. Later, the supervisor goes to the class to assess the extent to which the students are

capable of singing. But none of them are able to sing. So, he calls the teacher and enquires about the situation. The teacher replies that he was asked to teach music but was not specified about making the students sing at the end of the class. This was a real eye opener for me in the context of OBE.

Though it is a cartoon, it is much more worthwhile than several sessions which I have gone through in this regard. The most significant message I understood from the above cartoon is that while designing or scheduling a course or an activity the first thing to be taken into consideration is what the students can do by the end of the program or activity. All the other processes should be designed accordingly, focusing on the end point for the fruitful accomplishment of the goal. This realization made us hold various levels of discussions with the stakeholders to identify what activities and outcomes are significant at various levels of their academic progress to make the students successful in their life and career.

Accordingly, one of the prominent problems faced by the students is

We had discussions with the stakeholders in order to identify which activities and outcomes are significant at various levels of the students' academic progress to make them successful in their life and career.

employability. Various surveys conducted in India reveal that 80-85 % of students are not employable. Considering this situation, when we became autonomous and began working with the priority of the implementation of OBE, our department started task-based delivery of courses incorporating projects every semester.

In the context of the implementation of Outcome Based Education (OBE), we have designed and transformed the curriculum in tune with the OBE mantra - Making students demonstrate that they “know and are able to do” on completion of the course and the program.

The issue now is, how to cater to the individual differences of the learners. Experimenting with innovative methodologies and strategies was challenging since the mantra of social distancing that was contributed by Covid 19 always stood as a barrier in the way of the OBE implementation. We have worked with many blended models to generate better learning experiences for our students.

While experimenting with more personalized learning strategies, it was

found that in addition to introducing projects every semester, hackathons and other tasks and assignments which are provided regularly prove to be quite effective. Domain expert workshops are also included every semester to familiarize the students with various industry domains. Logic building sessions and add-on courses help the students in acquiring the required skill set. More than 25% of the syllabus is handled by industry professionals. Placement related activities like communication skill development, group discussions and aptitude training help the students in getting placements. ‘Creative studio’ is another program aimed at enhancing creativity and entrepreneurial skills. Finally, internships make these students ready for the industry. All the activities have clear and well-defined outcomes which point to the Program Outcomes that we have formulated.

We were very happy and honored to incorporate a bowl of methodologies that resembled a fruit salad. Now, the next challenge reared its head: “What are the indicators and assessment strategies to fit the methods and outcomes?”. We had both general and departmental meetings and sessions

to cater to the development of course designs and rubrics appropriate for OBE. Based on detailed discussions, we have developed both holistic and analytical rubrics appropriate for various courses and methodology.

The development of the OBE integrated automated evaluation system was another challenge. The preparation of question banks to accommodate proper and sufficient questions was a real experience. Like a pendulum oscillating between the Bloom's Taxonomy and the subject content, we could tailor out sufficient questions to build a rich question bank. But at times the pendulum ceased to oscillate. However, with the support, guidance and encouragement from Rev. Dr Roy Abraham, our Principal, we could keep up to the expectations of OBE.

Adverting on Operations research curriculum, has a perfect blend of methodologies and practices wedded to OBE. The students are provided with real life problems which they must formulate and solve. The curriculum gives sufficient space for the students to unlock their creative potential and to apply the cardinal principle of Operations research into their life and career in

order to have an optimized lifestyle.

It will not be complete if I do not get into the shoes of the students, especially when I am trying to reflect on OBE. Here, definitely the students are the real heroes. Initially, the students were skeptical about the new methods of evaluation and assessment. But later, they realized that this would benefit them when they seek jobs.

It was really a great experience when the door of the classroom opened to a broader space of high-level participation in constructive activities. It is worthy to observe that a few students who had an initial inertia to do something by themselves have been transformed to self-driven responsible scholars.

This does not mean that we have totally explored the full dimensions of OBE. Bigger elements are yet unknown and unexplored. As mentioned in the introductory statement, "Every mountain top is within reach if we just keep climbing."

We have the passion to climb and our climbing will continue.....

Dr Mendus Jacob is Senior academician and entrepreneur with over 30 years of experience.

AN EXPERIMENT BEFORE THE OBE IMPLEMENTATION



Dr Brijesh George John
brijesh.george@mariancollege.org
+91 9447181284

This article mentions an experiment undertaken by the MCA Department to introduce Entrepreneurship as a specialization in the course, and the experiences that led to measuring entrepreneurship skills as a component in OBE for the MCA Programme, which is not very common.

Even before Marian College started implementing Outcome Based Education (OBE), the MCA Department had been experimenting on this in our curriculum informally. Thanks to the autonomy granted to the college.

Introduction of Entrepreneurship as a Specialization in MCA Syllabus.

The Department introduced a new paper in the MCA syllabus – Entrepreneurship and Innovation - once autonomy was granted to us. The main aim of this was to foster entrepreneurship skills among students and to encourage innovation. More than just delivering some theoretical aspects of Entrepreneurship and Innovation, the syllabus was framed in such a way as to impart Entrepreneurship skills and encourage innovative thinking. Students were even encouraged to opt for Entrepreneurship as a specialization for MCA. Later on, based on our experience, Entrepreneurship and Innovation was introduced as a paper in the syllabus of the BCA course also.

In fact, Marian College had started fostering entrepreneurship efforts

right from its inception. An Entrepreneurship Development Centre was inaugurated on the campus through the setting of the MICAS Lab in 1999. However, a much more coordinated effort towards supporting entrepreneurship initiatives was strengthened when the Kerala Startup Mission, in 2015, selected the Marian Incubation Centre as a unit of IEDC for Startup Boot Camp activities.

The spirit of entrepreneurship started developing in the minds of MCA students with the introduction of new specialization and the development of mi3- Marian Innovation and Incubation Centre.

mi3 - Marian Innovation and Incubation Centre

With the support of the Innovation and Entrepreneurship Development Centre (IEDC), the Kerala Start-up Mission and the mi3, the MCA students were given workspace inside the college for entrepreneurial activities. Students were encouraged to initiate their own start up on the campus itself. Around fourteen campus startups mushroomed just from one batch - the 2017 – '18 MCA batch - and a few of them were incubated later as matured startups.

Fourteen companies mushroomed on the campus from MCA in one year itself. One of the projects was selected by Redhat and was premiered in the International Partners Meet.

One such success story is that of Inbesight, which is mentioned below.

Creative Studio and Digital Marketing Workshops

Apart from introducing the Entrepreneurship and Innovation paper in the syllabus of the MCA courses, Creative Studio and Digital Marketing Workshops were two out of the box initiatives organized by the MCA Department for the students to encourage entrepreneurship.

During the first semester of the MCA course itself, all the students were taken for a fully residential three day Creativity Development Workshop (8 AM – 10 PM) – ‘Creative Studio’. The first year students, around 60 plus in number, were divided into eight groups.

The idea was to develop creativity among students, develop their innovative thinking and team spirit, and to make them come out with some creative output in terms of videos, posters, websites, mobile Apps etc, that could especially be useful for some social causes or business idea development.

The initial day was dedicated to

giving inputs on Creativity, Innovation and technical matters regarding App development, website development, video editing etc.

Theoretical inputs for Business plan / Project Proposal development were also given. This was done by the faculty members of the Department as well as the External faculty team. Students were asked to come out with ‘out of the box’ ideas for business/ social service. They were asked to present a prototype of the idea or else a business plan, and on the second day these ideas were fine tuned using the support of the faculty team. On the third day, the students exhibited / presented their output in front of the college authorities, the faculty team of the Department and the other batch of MCA students. After a critical analysis, the best performing team was identified and rewarded.

Once such a video developed by a team led by Mr Sharvin and Mr Saji of the 2018 pass out MCA batch was selected by Redhat – the world’s top Linux Company - and the same was premiered in the Redhat International Partners Meet in 2019. Another video developed by the MCA students as part of the three day workshop on ‘Food Wastage’ was

widely appreciated, and the result was seen in the reduced amount of food wasted in the hostel during the next many days.

The MCA Department also realized that Digital marketing would be a hot skill for MCA students in the coming years, and the best idea to initiate Startups. Hence, the Digital Marketing Workshop was also initiated side by side to develop such skills among the students. Selected teams were awarded a few projects on digital marketing by the college authorities and also from outside agencies and companies. The successful completion of such projects and the subsequent revenue generation have motivated the young technocrats.

Framing of Start-up Policy

Apart from adding a paper in the syllabus, conducting many seminars and workshops and arranging table space for Start-ups, policies were also framed by the MCA Department to encourage entrepreneurship. Lenient attendance and assignment submission policies were introduced for students engaged in entrepreneurial activities. Credits were given for their projects and other measurable outputs.

A Success Story - Inbeesight

As mentioned earlier, out of fourteen entrepreneurial initiatives from one batch itself, we would like to feature the success of one company – Inbeesight. Inbeesight is now a web development company which also offers services in Pay per Click, Branding, SEO, Social Media Marketing, e-commerce website, app development, UI-UX design, etc. This company has successfully completed 47 projects in a short span.

The raw version of Inbeesight was initiated by four students of the 2019 MBA batch – Emil George, Shebin P. T., Manu M. and Alen Joseph. The students had come out with a lot of ideas during the college days which were iterated using the support of the faculty. They were given table space for incubation on the campus and other support in terms of Mentoring, Consultancy, etc. Once they graduated from the college, they moved out to Kochi, the financial Capital of Kerala, and started business in a big way. Now, Inbeesight is headed by Mr Emil George, and is running successfully.

Dr Brijesh George John is Associate Professor and Head, Corporate Relations, Marian College, Kuttikkanam, International Trainer, Social Media Influencer, Author and Traveler

Confidence from the social experiment

The success of this experiment has given the MCA Department the confidence to continue with Entrepreneurship in the curriculum, which is not followed in most MCA colleges. This confidence is the secret behind the decision to map Entrepreneurship skill as a component to measure the outcome of the MCA course.

HOW OBE TRANSFORMED US INTO FUTURISTIC TEACHERS



Mr Win Mathew John
win.mathew@mariancollege.org
+91 9447573105

Mentoring a virtual learning community who took admission without seeing the college, was the biggest challenge. But we succeeded.

For the last two years we, the faculty members of Marian College Kuttikkanam, met many times at different levels to discuss the implementation of OBE in our institution. Prior to that, we had several intellectual talks about OBE. After a handful of sessions, we got some ideas about the same but were not in a position to implement it. There were several barriers to implementing it which were:

- ↘ How to transfer this iceberg to the students as we knew only the tip of it, and it was very cold and hard to step on. Many ships, almost all Malayalee ships, on seeing the iceberg, diverted from the route and got rid of it. But our Captain was strong enough to face the consequences of conquering the iceberg. “Nothing is impossible if we think it is possible,” was the outcome of the challenge. And now we are proud to say that we have successfully implemented OBE in our curriculum.
- ↘ ‘Transfer the concept’ which was not fully accepted by many of us, to the students on the other side of the virtual classroom. Yes, it was a big challenge, because we

The traditional counsellor has changed to an outcome based mentor. This transformation in us made us possible to transform a traditional student to an outcome oriented learner.

were not able to see the facial expressions of the students. We, however, overcame it through continuous mentoring.

- ↘ 'Mentoring a virtual learning community' who took admission without seeing the college. It was really a challenging task to facilitate a learning community who seemed to be like chat friends. But that too we did successfully through one to one video conferencing.

- ↘ 'Preparation of the question bank' with a bunch of application level questions, was another challenge.

This was also successfully overcome by introducing the 'buddy system' in which each faculty colleague was assigned to a critical review of the questions.

- ↘ 'Grading of assessments' where the traditional thought process of exact answers to the questions has drastically changed to our Indian culture ('Unity in Diversity'). This was achieved by

providing rubrics for each course outcome.

We had to strive hard to overcome these barriers, and we achieved it by continuous learning and sharing. The mind of a traditional teacher has now become that of an outcome based facilitator. The traditional counsellor has changed to an outcome based mentor. This transformation in us made it possible for us to transform a traditional student to an outcome oriented learner.



Mr Win Mathew John, Associate Professor and Senior Academician with professional experience in Computer Science related Pedagogy.

HANDLING CHANGE IS THE KEY TO HAPPINESS



Mr Robins A. Kattoor
robins.kattoor@mariancollege.org
+91 9447940995

Restructuring the
Database
Management
syllabus helped
students to make use
of OBE methodologies
in a practical way.



The only constant in life is
change.

Heraclitus

If not for the Greek philosopher Heraclitus and his propounded theory of universal flux which he expressed in oracular language, it would not have been easy to keep track with the constantly changing methodologies of higher education in the modern day.

While we, the members of the Board of Studies of the PG Department of Computer Applications, sat around the discussion table on 03/04/2020, enjoying a hot cup of coffee and the slow mist from the serenity of Kuttikkanam hills lashing us from all around, little did we know that we were paving the way for young learners to create history.

It was the decision taken in the meeting that each faculty member take charge of the subjects entrusted to them and make the necessary

changes, in consultation with the peer team members, to ensure that all courses taught in the PG Department of Computer Applications adhere to the standards of Outcome Based Education.

In subsequent meetings, Program Objectives and Program Specific Outcomes were finalized. This gave individual faculty members the opportunity to design their own course outcomes for the courses assigned to them.

We felt content, when our approach towards OBE bore its sweetest fruit in the form of a state award to our students, when they competed with around 600 contestants from all over the State and emerged winners in the 'Vaigai-agri hackathon' conducted by the Ministry of Agriculture, Kerala State. This achievement was indeed the result of the practice that they had had by taking part in many hackathons as a part of their specialization stream.

As part of implementing the OBE, it was decided that the students should do a software project in all the semesters. The fact that above 50% of the students got placement offers within two weeks of their course comple-

Task oriented activities assigned to students helped them to concentrate on the practical side of the tasks, and that, in turn, led them to their dream jobs faster than ever.

tion, even before their results were published (offer letters available for reference), is a visible impact of the success of the OBE implementation .

My Experiments with OBE using PMC2002 Database Management Systems

It was my long-time wish coming true when our college obtained autonomous status, because that gave me the opportunity to restructure the curriculum and plan the evaluation strategies that would assess the student's learning rather than his/her memory.

Regarding Database Management Systems, I redesigned the course in such a way that each module is directly linked to one course outcome.

The course outcome was designed in such a way that the students would be able to apply what they have learned, and their assessments would be done directly in connection with their ability to do things.

For example, the Module1 course outcome is that the student demon-

strates his/her understanding of a system using some design tools like ERDiagram. The associated CADL activity is that the students submit the ERDiagram of the software project he/she undertook that semester.

Such task oriented activities assigned to the students helped them to concentrate on the practical side of the tasks, and that, in turn, led them to their dream jobs faster than ever.

This does not mean that the implementation of OBE is full and complete. There is definitely a long way to go, but the path taken so far has been promising, and it gives the courage to march ahead with confidence.

Mr Robins A. Kattoor is senior faculty member of the PG Department of Computer Application with experience in handling diverse topics in Computer Science.

“

Forget about all other ideologies.
What counts now-a-days is
MARKSism.



OBE - A SLOW AND STEADY APPROACH



Mr Satheesh Kumar S.
satheesh.kumar@mariancollege.org
+91 9400755768

This article may be considered as an introduction to the OBE concept. The OBE concepts unfold as a sequence of events which the reader (most probably a university level teacher) can easily relate to.



Give a man a fish, and he'll eat for a day. Teach a man to fish, and he'll eat for a lifetime.

In the context of the Outcome Based Education (OBE), I believe, the above adage is significant for many reasons. To understand the differences and the efforts required to develop an OBE based curriculum, let us imagine a hypothetical situation. Since we started with a reference to fishing, let us assume that a university has found (through various means) that 'fishing' is the current buzzword in society (like the 'AI' of today).

A Committee was set up and entrusted with the responsibility of implementing the course in the university. The Committee, in turn approached two professors 'A' and 'B' considered to be domain experts, and gave them the task of designing a curriculum on 'Fishing', which was to be finished in a month's time. Eventually, the Committee would evaluate both the syllabi, and the best approach would be taken forward .

Now, let us see how these two professors approached the same problem.

The two approaches



Professor A

"Faster and Smarter" - The "Hare"

In the process of designing the course, Professor A took the easier and the faster approach. Her approach was as follows:

- Referred the syllabi of other universities that taught courses on fishing and copied some content she thought was relevant to her course.
- Referred some popular books on fishing and took a few topics from

The OBE concepts are simple to understand, and are not specific to any domain.

- that.
- Consulted some of her peers and included some topics based on that.
- Arranged the topics into five modules so that they matched the credits for this course
- Included a reference section at the end.
- Defined the overall assessment strategies based on the existing patterns.

It took her merely two weeks to complete the entire set of tasks, and she was very content with the outcome of her effort. Without wasting time, she submitted the curriculum to the Committee and was quite confident that her proposal would be the one which would be selected for implementation as she had learned from some of the Committee members that there was no communication from Professor B on this matter.

Professor B

“The Slow and Steady” -The “Tortoise”

Meanwhile, Professor B decided to experiment with a new approach in education called ‘Outcome Based Education’, popularly known as OBE.

Earlier she had attended a workshop on OBE and was eager to implement what she learned there, and thought this was the right opportunity for that. Even though she knew from the beginning that this was going to take time, she decided to take the route.

She went through her notes from the OBE workshop where it stated,

“OBE organizes the entire educational system towards what is considered essential for the learners to successfully do at the end of their learning experiences. In this model, the term ‘outcome’ is the core concept.”

Source : https://en.wikipedia.org/wiki/Outcome-based_education#cite_note-1-11

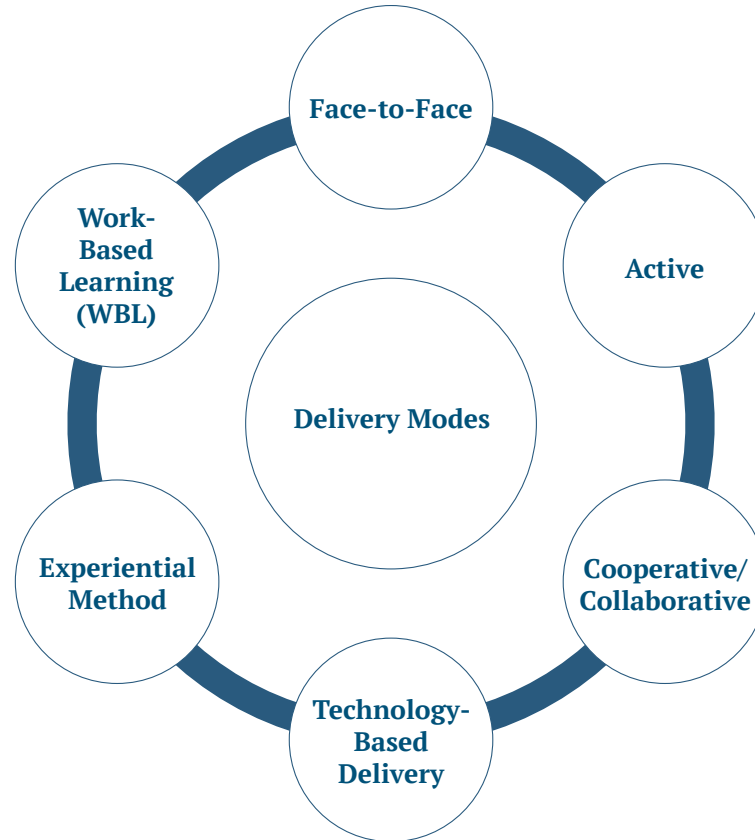
How should she start this process? Again she went back to her workshop notes where it stated, **“From the requirements that you have collected from stakeholders and needs of the institution, define the goals and skills you want the students to achieve.”**

After due consultation with all the major stakeholders (she even consulted some hobbyist fishermen), she arrived at the following course

OBE - DELIVERY MODES

- Lecture
- Guest Speaker

- Practical
- Industrial Training
- Work Attachment
- Field Trip
- Visit



- Presentation
- Tutorial
- Seminar
- Colloquium

- Problem-Based
- Case Study
- Project-Based

- Online-Learning
- Teleconference
- Simulation

- Lab
- Demonstration
- Workshop

outcomes:

At the end of this course, students shall be able to

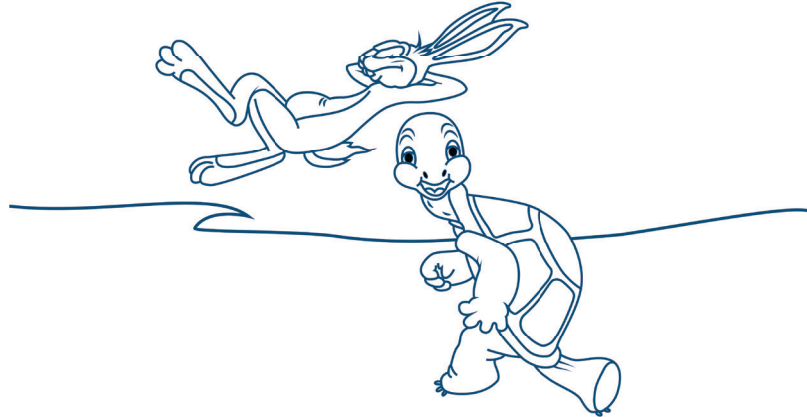
1. Prepare the fishing pole.
2. Respool their reel.
3. Put the hook, sinker and bobber on their line.
4. Put the bait on the hook.
5. Cast the line.
6. Catch the fish.

Source :<https://www.siu.edu/~creller/fish5.html>

Once the outcomes were defined, it was time again to refer to her workshop notes for guidance, where it said the next step was the following:

Demonstrating outcomes

This is the phase where the students are expected to demonstrate their accrued knowledge. For this, the key is to define the benchmarks for each outcome. Since the outcomes were very definite and straightforward, setting the benchmarks was quite easy. It was a matter of assessing the students' progress with their handling of the fishing equipment, and how well they progressed with each individual task.



The next step outlined in the notes was this:

Deciding on delivery modes

While on this topic, her attention was drawn towards the following diagram in her notes.

Source : https://s2.studylib.net/store/data/005429335_1-b39c7bc-28de22c3f55bdfb12194577e5-768x994.png

Armed with this information, some of the strategies of delivery she planned included

1. Taking the actual fishing equipment to the class and letting the

students know how to operate them individually.

2. Demonstrate each task before them.
3. Make them actually perform the tasks in a simulated environment.

Then, she defined assessment strategies based on the benchmarks she had defined earlier.

She created 'Rubrics' for every assessment she planned. Rubrics are nothing but tools used to grade each student for his/her performance in the assessments.

She also documented that the last outcome of the course should be

assessed in a live environment, and for that the students would be taken to a nearby fish hatchery. There, they would be assessed based on their performance in fishing in a real environment.

It took her almost a month to finalize and integrate these components and submit her proposed course to the Committee just on time.

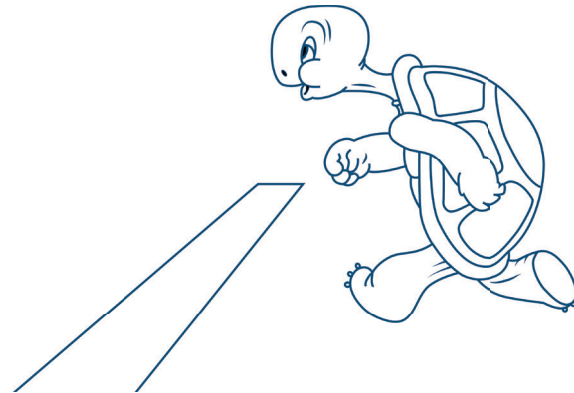
Conclusion

The Committee evaluated the course proposals submitted by both the professors and came up with the following comparisons:

The end

The curriculum designed by Professor B was recommended for implementation based on the above evaluation. Thus the “Tortoise” emerged victorious in this story as well.

Professor A	Professor B
A large part of the curriculum is merely repetition of the existing curriculum in other universities.	Curriculum is planned and designed according to the needs of today's students.
The focus is on completing the syllabus.	The focus is on developing the skills needed.
There are no standard measures to assess students' achievement.	Clear outcomes and benchmarks propel the students to excel in the core competencies.
Grades are merely given based on examinations towards the end of the curriculum.	Assessments are formative based on the defined levels, and grades are given based on the achievement of these levels.



Mr Satheesh Kumar S. is currently working as Assistant Professor in the PG Dept of Computer Application. He has over ten years of experience in PG level teaching, and has more than five years of experience in the software industry. He was instrumental in establishing the Marian College blog 'Marian Pulse'. He is also a certified Yoga trainer.

AN EMPOWERING AND PARTICIPATORY CHANGE PROCESS



Ms Kochumol Abraham
kochumol.abraham@mariancollege.org
+91 9446286893

The implementation of OBE enabled students to think critically and solve different problems. It was an active and engaging process which was a transition for the learners to prepare themselves.

Introducing to our new students a new stream of the curriculum using OBE, and that too in a virtual environment, made me think in a different way. The position of 'Data Scientist' is one of the hottest job positions in the analytical industry.

Data Science is the stepping stone to achieving that position. Being a facilitator of the course, I had to enlighten the learning community with the importance of the course.

I would like to share my reflections regarding the experiences related to the paradigm shift of Teacher-centred to Learner-centred approach.

'An empowering and participatory' change process.

The students had to think critically and solve different problems. It was an active and engaging process which was a transition for the learners to prepare themselves.

Activity oriented assessments

This made the students improve their analytical, problem-solving, communication and team work skills by inculcating appropriate knowledge through real life scenarios.

A paradigm shift from teacher-centred to student-centred learning is a key part of OBE. Increased student involvement allows students to feel responsible for their own learning and think out of the box.

Clarity

The focus on course outcomes creates a clear expectation of what needs to be accomplished by the end of the course. Students will get to know what is expected of them and teachers will understand what they need to teach during the course.

Shift of paradigm

A paradigm shift from teacher-centred to student-centred learning is a key part of OBE.

Increased student involvement allows students to feel responsible for their own learning and think out of the box, seek answers to such questions as 'why they need it' and 'how they should do it.'

Teacher as facilitator

OBE places students at the centre of learning, making them active and responsible learners. At the same time, it modifies the role of a teacher from being a 'giver' and a 'presenter' of knowledge to being a 'facilitator' of the learning process.

Ms Kochumol Abraham is Assistant Professor at PG Dept of Computer Applications. A person with expertise in multiple IT Domains

Barriers encountered in the OBE implementation process:

- While OBE emphasizes on student-centred learning, the actual implementation of OBE was heavily reliant on the teachers as presenters of knowledge.
- Apart from directly objective assessments such as tests, assignments and projects, conducting indirect assessments was challenging.
- Creating a question bank with a sufficient number of questions that had clarity while focussing on the evaluation of the course outcomes proved to be extremely challenging.
- Grading of assessments after specifying what was to be done through adequate rubrics made the grading process a challenging job.

Outcome Based Education is the necessity of the hour, and should be implemented wherever skills and knowledge are concerned.

MY OBE EXPERIENCE REGARDING THE COURSE 'SOFTWARE ENGINEERING'



Ms Reny Jose
reny.jose@mariancollege.org
+91 9446984809

The main achievement of OBE in Software Engineering is that students are able to describe what the customer wants in a project, and how it can be turned into reality.



The rules of the world are changing. It is time for the rules of teaching and teachers' work to change with them.

Andy Hargreaves

The Principal of Marian College Kuttikkanam announced that in the new academic year we were going to implement a new system of education called OBE. The teachers were asked to take a few classes based on the new system. The course allotted to me was Software Engineering. I thought it was going to be very easy. But in reality, it was not. My doubt was, without following the traditional teaching methods, how could I make students understand the basic concepts?

I started to look through different books and websites to collect 'activities'. This gave me a new insight into the subject and helped me make/customise scenarios that suited the

Vision and Mission of Marian College.

The teaching and learning methods used previously in our Programs were largely designed by the principles of knowledge-oriented education (KOE), in which instructors delivered knowledge to students. But we discovered that the result of learning at such a superficial level meant that students could just recite the concepts or merely possess knowledge of the courses, but fail to display initiative or demonstrate problem-solving skills.

This was true in the case of Software Engineering. Earlier, the students were studying different concepts and processes without knowing where or how they could be used in real life scenarios. This problem could be rectified with the implementation of OBE. OBE could tremendously help the students understand how useful Software Engineering could become in the field of software project development.

The main achievement of OBE based education in Software Engineering is that the **students are able to describe what the customer wants in a project and how it can be made into a reality.**

Students will be able to understand a course based on clearly spelt out learning objectives: the Course Outcomes (COs), Program Outcomes (POs) and Program Specific Outcome (PSOs).

Based on predefined course outcomes, my aim was to make students become software engineers and familiarize them with the development of enterprises scale software, and help them attain problem-solving capability in software development.

To achieve these objectives, during the OBE implementation, I used the following:

- Case studies to understand different projects
- Scenarios which would help to understand the use of different process models
- Case studies for developing Software Requirement Specifications document
- UML diagrams designed, based on different situations
- Testing cases developed, based on use cases
- Project planning based on the Software Requirement Specifications document

The learning activities were:

- Lectures to introduce the topics to the students
- Tutorials for discussions and completion of activities/assignments
- Problem-solving activities

- Programming lab used to complete projects

Assessments chosen for this course included a mix of both formative and summative ones. The assessments were chosen for the course with clear learning objectives by checking the compatibility of learning domains, performance and criteria requirements.

A formidable challenge I faced was in the evaluation of activities. We had a class of 66 students, and evaluating each activity based on the corresponding topic was time-consuming. My observation is that if the number of students is less, then it is very convenient for and fulfilling to the teacher to evaluate the activities. Another observation is that we need to provide activities in a mixed manner for the same concept. One activity may be suitable for a particular group of students but a different one may be suitable for another group. The same is applicable for the introduction of concepts and teaching strategies. Covering the syllabus within a short time frame is another challenge when the syllabus is vast.

Another major challenge arose during the question paper preparations. We

had to create a scenario or a case study that could be answered in half an hour. Within three hours, students should be able to understand the scenario, and based on that, they had to answer five questions. Developing such questions is truly a great challenge.

A few textbooks helped me overcome the challenges. One interesting thing I found out was that most of the books by Indian authors gave a good list of exercises that could be used in the classrooms.

Sample questions

1. The college library has the usual resources [like discussion room, laptop browsing area etc.] and users for these resources. A software has to be developed so that the resources are assigned without conflict. Draw a use case diagram and activity diagram specifying the above system.
2. A grocery purchase list is a common thing for all houses and is created/ added daily by the women in the house. However, the purchase by men/women in a house depends on the list priority. Some items are purchased

monthly, whereas other items are purchased daily. The project aims to create a mobile app that helps to create a grocery purchase list and share it among the members of the family. The App helps to prioritize the items and also categorizes purchases that should be done on weekends or daily or on a particular day. All members of the family are able to update the list. When an item is purchased by one family member, it will be shown as 'X has purchased on *** date'. Prepare an SRS (system requirement specification document) for the above mobile application.

The major advantage of OBE is the sense of clarity it fosters. Students will be able to understand a course based on clearly spelt out learning objectives. The Course Outcomes (POs), Program Outcomes (COs), Program Specific Outcomes (PSOs) will help the students understand exactly what they are expected to accomplish. This will enhance the quality of teaching and delivery as well as learning.

“Sometimes there are things in our life that aren’t meant to stay.

Ms Reny Jose is Assistant Professor at the PG Department of Computer Applications, with a passion to learn new technologies and impart them to students.

Sometimes, change may not be what we want. But sometimes change is exactly what we need. Change is a good thing.”

OBE – THE FUTURE OF EDUCATION IS HERE



Sr Italia Joseph Maria
sr.regina@mariancollege.org
+91 9447678070

Education is now undergoing a significant transition from the traditional mode to what is called 'Outcome Based Education'. This article shows how Outcome Based Education is becoming the current mode of education, and how the same can be implemented.

The Covid -19 pandemic has pushed the entire education scenario to an online mode. With digital education already on the fly, complete online education was considered not a difficult task. But, education which aims at the wholesome growth of the individual has to focus today on a generation that is pushed to be online both in academics and entertainment. Making students focus on traditional slides and video lectures is simply an act of foolishness these days. Creativity, curiosity and dynamism that dwell in the blood of this new Z-generation who were born with the internet as a part of their DNA, pose challenges to teachers who have to engage them. Here comes the significance of Outcome Based Education where everything has to be taught with the end in mind.

Traditionally, education consisted of classroom sessions, practical hours and outdoor activities. What the students were expected to learn was never known to them or ever clearly stated by the teachers. Teachers used to take the students on a tour of what was given in the syllabus prepared by some experts, with an examination that evaluated the students at the end. With digital technologies taking over, this traditional setup was seen

to be transforming to flipped classrooms, blended learning, personalized learning, augmented learning, and open and distributed learning. The evaluation mode did not seem to change much, though internal assessments had a role in the final results. But, now with complete online learning on the go, more substantial transformations are needed, which emphasizes the need and role of Outcome Based Education.

In Outcome Based Education, a substantial paradigm shift can be seen in the higher education arena with a move from the process to the product model. Here, the teaching and learning process is transitioned to give importance to the learning outcomes of the education experience. Teachers used to note "WHEN" and "WHERE" students learned in the process model, whereas now in the product model, teachers, also known as 'facilitators', take note of "WHAT" is learned and "WHETHER" it is learned properly.

An illuminating journey that it is, the process of finding out the learning outcomes of a course brings to light many unknown areas to the teachers themselves. What the students are expected to learn and how to learn them are explicitly provided, and learning

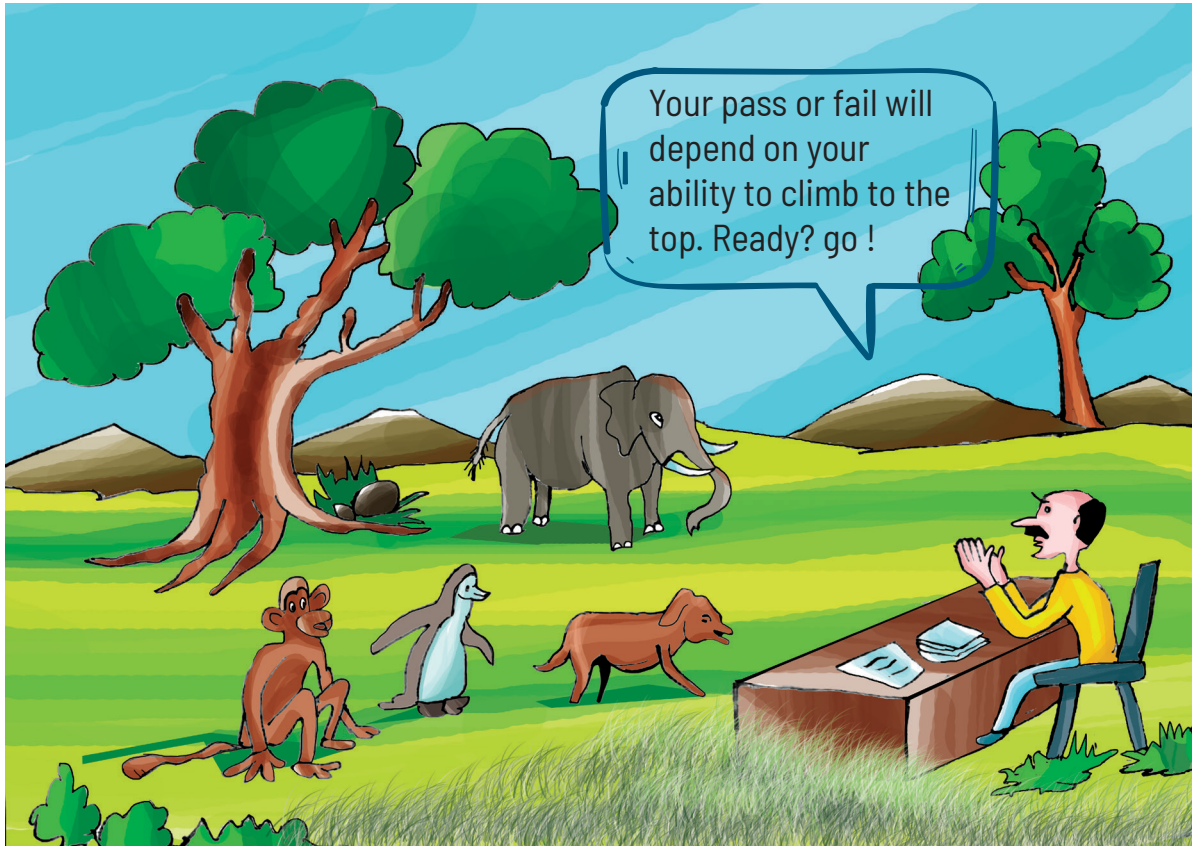
- Traditional education has drawbacks in educating the current Z-generation students.
- Digital education was already happening.
- Covid-19 has pushed education to online only mode.
- Outcome Based Education focuses on what is learned and ensures whether it is learned.
- OBE makes students ready to face the VUCA world.
- OBE achieves the aims of education: individual development and welfare of humanity.

progresses that way. The content of the courses given in the syllabus is directly related to the outcomes to be produced by the students.

The students of today are to be prepared for the future of tomorrow, which is none other than a world of disruptive technologies, with already Industry 5.0 calling upon Education 5.0. Not only should their technical skills be sharpened to face and overcome the challenges of the volatile, uncertain, complex and ambiguous (VUCA) world before them, but rather their humane and value systems should be focused on the betterment of the society. In other words, the outcomes produced by the students as a result of their education should be reflected in service to the society at large, in one way or the other. OutcomeBased Education, thus, rightly achieves the aims of education which include a holistic development of the individual and the welfare of humanity.

Sr Italia Joseph Maria is currently pursuing PhD in Computer Science and is an Assistant Professor in the PG Department of Computer Applications. Her research interests include Machine Learning, Data Analytics, Bioinformatics and Educational Technology.

“



EXPAND YOUR VISTAS. MAKE THEM BELIEVE IN THEMSELVES



Mr Krishnaraj S.
ceo@synergythoughts.com
+91 8281801919

The OBE Strategies in Communication Skill Enhancement as well as Personality Development programmes helped the students a lot to realize their inner potential.

When I used to handle Personality Development and Communication Skills training for the MCA students of the PG Department of Computer Applications in the earlier years, the strategies were age old. The students were taught skills that would boost their capability, and lecturing was the main medium adopted to impart the concepts.

When OBE was introduced, I had a discussion with the Director of the Department and the brainstorming resulted in remodeling the methodologies. We identified the major issues that the students faced in terms of communication skills as well as confidence level. The issues identified were:

- Many students with excellent linguistic skills were not able to communicate verbally with ease and felicity.
- The primary reason for the same was lack of confidence.
- The majority of the students did not believe that they could be successful.

We planned a bootcamp model activity, and further collaborated and developed the plan for implementing

the bootcamp with specific learning outcomes in mind. The programme was named 'Creative Studio.' Students were grouped into teams and assigned a number of activities, in many of which they did not have any expertise.

They had to produce a short film of less than five minute duration. They were not offered any production tools or resources, and were assigned to identify everything they needed. The time allowed was less than 60 hours.

They learned about the power of teamwork, dedication, brotherhood, quick learning, identifying and utilizing the right resources, and time management. Many films were shot using the mobile camera, and they edited output using the mobile devices.

When the teams presented their finished products on the third day, most of them stated that they themselves could not believe that they could do so many tasks within such a limited timeframe. The concept of work being completed within the specified time was thus demonstrated. To their astonishment, most of them had mind blowing creative pieces of art with them, all of which had sprouted just as an idea and implemented

The most visible and evident outcome of the bootcamp was that the perception of the students changed. Many tasks that they had earlier considered impossible were now possible for them.

with little resources, that too, within extremely confined deadlines.

The outcome of the programme.

The most visible outcome of the bootcamp was that the perception of the students changed. Many tasks that they had earlier considered impossible were now possible for them. They understood that the thinking of any goal as an impossible one was just a matter of their own perception.

The most visible effects were that they

- started believing in themselves.
- became possibility thinkers
- started perceiving things in a much more creative way.
- nurtured an empathetic mindset.
- became more goal oriented and optimistic.
- started volunteering in classroom activities.

Mr Krishnaraj S. is Life Skills Coach, Corporate Trainer, Teacher and Author

“

In classthroughout
the year we have
focused on learning
in a way that best
suits you.

I helped you set
personal goals, helped
you reach your unique,
individual potential, and
now the time has come
to measure the results.

- With a
standardized
test.



PLAN, TEACH, TRACK AND REVIEW- OBE PRACTICES FROM A LANGUAGE POINT OF VIEW



Dr Blessen S. Abraham
blessen.siby@mariancollege.org
+91 9747592185

The advancement following the installation of Outcome Based Education at Marian has changed the definition of mere lecturing to facilitation, and a lecturer to a facilitator.

Indian educational system, conceivably more than at any other time, faces compressions for cataclysms in response to the rapid developments in the field of academics. The influence of Artificial Intelligence, big data and machine learning along with the other advances in Information Technology, globalisation influencing science and technology, changing political and public expectations, demands from within the profession and developments in how we look at teaching and learning, have led to a strategy to improve our system of education.

The greatest catalyst for change, it has been argued, is a language that will allow us to discuss what we are expecting learners to learn and how we should assess this (Jessup 1995). This themed issue of a facilitator illustrates how learning outcomes can provide this necessary language. Jessup's essential thesis concerning Outcome Based Education (OBE) is "If education or training is defined by outcomes, it opens access to learning and assessment in ways which are not possible in a traditional syllabus or programme-based systems. Once learning is targeted on outcomes, the other features of the model follow as a natural consequence. Many of the

problems we face in education and training could be solved by this model." (Jessup 1991). It is in this context that we discuss the OBE practices and methods that we Marianites follow.

The advancement following the installation of Outcome Based Education at our campus has changed the definition of mere lecturing to facilitation and a lecturer to a facilitator. From my understanding, the Marian teaching community has envisaged the academic growth of our learners by incorporating their efficacies by encouraging the learners to differentiate between learning and studying. Learners have been entrusted by their facilitators with the onus of experiencing the different discourses by exploiting the learning outcomes to the maximum, using a wide array of references and resources provided. The Department of Communicative English displays an unflinching commitment and participates very actively in the process of OBE at Marian. As a department with academic reach to all the different departments at Marian, the first-year undergraduates received comprehensive training in all the skills of English language during the current academic year.

The Department of Communicative English displays an unflinching commitment and participates very actively in the process of OBE at Marian. As a department with academic reach to all the other departments at Marian, the first-year undergraduates received comprehensive training in all the skills of English Language during the current academic year.

Globally, Outcomes Based Education (OBE) was initially treated as a controversial model of educational restructuring that defines learning as what learners can demonstrate that they know. However, William Spady's radical vision had paved the way for academia in considering self-evaluation, using performance data and other information, targeted to sustained self-improvement. The progress being made against the targets set by the Department of Communicative English are being monitored on an ongoing basis. The set targets are for average performance to achieve the goals framed as per the OBE. As key players in the process of a learner-centric process of education, the Department of BACE at Marian have clearly understood and formatted its style of course deliverance through a process that while progress has been made, there is a pressing need for continued improvement in educational attainment.

With the aim of introducing the essential features of good pronunciation, the Department of Communicative English facilitated the first-year undergraduates with a common course, UCE2001-Essential English for Undergraduates. The process of

deliverance with the objective of unlearning and relearning the core essentials of English Language was indeed a prodigious practice for the department. Our main goal was not making the learners speak like native speakers of English, but helping them to communicate English in such a way that everyone understands their tongue.

As non-native speakers of English language, our learners initially found it challenging as they had carried forward a language register from their school education. The process of unlearning the register was the most hard-hitting part along with the influence of mother tongue in the deliverance of the topics, when the learners found the alienated aspects of Phonetics and Phonology quite grim. The unlearning part was followed by introducing and learning the speech sounds in English Phonology, how speech sounds are produced with the help of our various body parts including the lips, the tongue, the teeth, the pharynx and the lungs. Though the production of sounds and its practice was cumbersome for a majority of our learners, they found it interesting and understood the clear differences in sound-spelling correspondence, especially the low in English language

Nevertheless, the challenges during the pandemic are on the high, raising standards started with every learner in the Department and so every facilitator played their part through a systematic and organised contribution to the process of OBE.

and the high in their mother tongue.

After learning the different speech sounds (International Phonetic Alphabet, IPA) and how they are produced, our learners started practising the language using the features of native language users. It is important to understand that many of the learners continue to use the newly learnt pronunciation skills in English language, with a clear understanding of how sounds are produced, transmitted and received. The lessons we delivered helped our learners improve the general standard of their performance in everyday conversation and make them intelligible to people coming from various parts of India and abroad.

Considering the challenges posed by learning the exact speech structure of a foreign language when the learners acquire a second language, expert academic sessions were made available to the learning community, when the world-renowned linguist Professor Stephen Krashen of the University of Southern California delivered his viewpoints on Second Language Acquisition and his Monitor Hypothesis. This session clearly demonstrated that our learner's learned system acts as a monitor to what kind of speech sounds, they are producing. In other

words, while only the acquired system is able to produce spontaneous speech, the learned system is used to check what is being spoken.

Nevertheless, the challenges during the pandemic are on the high, raising standards started with every learner in the Department and so every facilitator played their part through a systematic and organised contribution to the process of OBE. Considering the second course outcome mentioned in the curriculum of UCE 2001: Articulate words and sentences clearly stressing the right syllables, it is evident from the responses that we receive from the learners that they have raised their standards from mere students to learners and they have adapted to those standards exceptionally well. To our astonishment, we have found that many of our learners started writing simple sentences using the International Phonetic Alphabet (IPA). This is indeed a constructive sign in the process of unlearning and relearning English language following the internationally accepted methodology of language learning.

However, more emphasis should be given to raising overall performance and narrowing the gap between the highest and the lowest achievers, and

As facilitators, the chances we receive for our continuous professional development must lead to effective self-evaluation and the actions that flow from it will deliver educational improvement for the learners.

between the most and the least disadvantaged learners. This is achievable only by the collective and sincere efforts of our teaching fraternity. Along with some excellent practices of the teaching-learning process, it is evident that a hands-on approach or a first-hand involvement of the learners in the progression could lead to better practices in their professional and personal life. The development of learning through experience is more narrowly defined as “learning through reflection on doing”.

As an educational institution that consistently strives for excellence and development in the field of academics, Marian College has framed some outstanding standards and criteria for its academic framework. This has undeniably created a sense of setting targets for the facilitators by themselves using self-evaluation, performance data and other available information, leading to sustained self-improvement. As facilitators, the chances we receive for our continuous professional development must lead to effective self-evaluation and the actions that flow from it will deliver educational improvement for the learners.

Based on the performance trends and

Everything that we do is focused on what we want our learners to know, understand and to be capable of doing.

As an important aspect of instructional design, creating a proper lesson plan adds to the process of getting ready with the rudiments of the OBE framework to create learning objectives, organise and deliver course content, and plan and prepare to learn activities and materials.

improvement plans, each facilitator should set a more challenging target for themselves for further advancement and the intended result. When setting targets, facilitators should wish to take into account a range of factors, including:

- trends in performance during the current/previous academic semesters
- the prior attainment of each semester
- the context within which Marian is operating and how it compares to other colleges in similar circumstances
- the priorities set by the IQAC

The outcomes, which are defined at three levels as Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs), have all contributed analytically to the professional development of our facilitators and also to a focussed vision of our learners' learning ability. The course UCE2001: Essential English for Undergraduates had seven different Course Outcomes (COs). Everyone has got a feeling that the most important aspect of the outcomes framed by Marian is that they are observable and measurable according to the standards set by the well-de-

finer framework of the taxonomy of learning. It certainly identifies all the three domains of learning: Cognitive, affective and psychomotor, and helps the facilitators frame some exclusive question banks in search of the learner-centred responses.

The principles of Outcome Based Education are structurally organised and clearly defined in all the assessments that we do as facilitators, which serve as a tool to measure our learners. Everything that we do is focused on what we want our learners to know, understand and to be capable of doing. It is with a clear focus that we as facilitators design and create Bloom's taxonomy-based assessments based on high expectations, which could lead to expanded and greater opportunities for our learners. However, as a facilitator who stringently shadows the ethics of the outcome-based teaching-learning process, an extra sense of concern regarding the planning of lessons remains at the crossroads of my teaching mind. A promising learning outcome is possible at the outset of a proper lesson plan only, which is where we fail in acknowledging the expectations of the OBE method. As an important aspect of instructional design, creating a proper lesson plan

Apart from the four key language skills - listening, speaking, reading, and writing - the Department also endorses higher-order thinking skills, which will enable our language learners to get acquainted with the classifications, principles, generalizations, theories, models, or structures pertinent to the English language.

adds to the process of getting ready with the rudiments of the OBE framework to create learning objectives, organise and deliver course content, and plan and prepare to learn activities and materials. It also outlines the type of formative and summative assessment methods that we use in our classrooms. Besides, it is imperative to believe that planning a lesson adds efficiently to the framed outcomes.

The academicians at the Oxford University Press (India) have efficaciously pointed out the need for appropriate lesson planning before delivering the topic to the class. Assessments are valid and conceivable only after the facilitators plan their lessons, facilitate the learners with the prerequisites of the content, track their lessons using a wide array of formative assessments, and review the course/ learning outcome using a range of summative assessments.

Outcome Based Education (OBE) is undeniably a learner-centric learning model that helps the facilitators to plan the course delivery and assessment with the endpoint in mind. The result should be that the learners tame all the essential twenty-first-century skills, making them a complete product both professionally

and personally. The facilitator should keep in mind the endpoint (outcomes) when he/she designs the curriculum (while planning lessons, designing assignments and assessments, lecturing and other activities). Everything a facilitator does in the classroom should ultimately lead the learner toward the outcomes of the course.

In addition to the fine-tuned educational practices followed by the Marian teaching community, we as facilitators should promote certain educational activities such as the creation of learning communities, undergraduate research, and service-learning which are identified as high-impact practices (HIPs) pointed out by the eminent educationist George Kuh, because they engage learners in active learning that elevates their performance on the desired outcomes. Our CARS and CADL assessments are indeed great tools to promote such practices of excellence. It should also contribute heavily to high-impact practices (HIPs), which are active learning practices that promote deep learning by promoting learner engagement. We, as facilitators, should bear in mind that our learners should carry forward the legacy of being a Marianite in the job market.

The CARS and CADL, alongside all

Following the OBE practices, our learners develop a sense of inquiry and research, very specific or finite skills, systems, techniques and particular methodologies that will enable them to further advance their capacities as future globe makers.

other formative and summative assessments framed by the Department of BACE, underwrite the factual, conceptual, procedural and meta-cognitive knowledge in tune with the frameworks prescribed by the institution. Our OBE underlined practices will certainly create a learning community irrespective of the majors they follow with the ability to interconnect all the language skills, understand and practise the essentials they receive from within a language classroom. Apart from the four key language skills - listening, speaking, reading, and writing - the Department also endorses higher-order thinking skills, which will enable our language learners to get acquainted with the classifications, principles, generalizations, theories, models, or structures pertinent to the English language.

Following the OBE practices, our learners develop a sense of inquiry and research, very specific or finite skills, systems, techniques and particular methodologies that will enable them to further advance their capacities as future globe makers. It is seen from our learners that they are well aware of their cognition

and particular cognitive processes, thereby showcasing their strategic or reflective knowledge about how to go about solving problems, cognitive tasks, including contextual and conditional knowledge and knowledge of self. With some stupendous specifications and summsimus practices in outcome-based education, it is clear and palpable that Marian College will emerge as the leader of Indian higher education in the near future.

Dr Blessen S. Abraham is Assistant Professor in the Department of Communicative English, Marian College, Kuttikkanam and also serves as Resource Person for Oxford University Press (India).

APPLICATION OF OBE SYSTEM IN THE PRACTICAL COURSES OF THE PG PROGRAMME OF COMMUNICATION AND MEDIA STUDIES



Fr Sobi Thomas
fr.soby@mariancollege.org
+91 9744681411

The article deals with the challenges faced and the solutions found during the application of the OBE system in the practical courses of the programme, MA in Communication and Media Studies.

The postgraduate programme of Communication and Media Studies in Marian College endorses the inclusion of more practical courses in the curriculum. When we applied the OBE system to our curriculum, the courses became more interesting and challenging.

The movement from the classical classroom teaching structure to an Outcome Based Education system totally paved the way for a new wave in the teaching and learning of Communication and Media Studies. The students became more learners than mere listeners. The transformation is evident from the fruits they produced. There is also a change from the examination-focused to an output-oriented system or from a qualification-based to a quality grounded system.

OBE transformed the entire education system into personalized learning. Teachers became more facilitators of the outcome achievers. They became the designers of instructions that helped the students to achieve the outcomes. The satisfaction of teaching transformed from the mere completion of syllabus and attainment of top grades to the achievement of outcomes by the students.

The Challenges

In the beginning, as in the promulgation of every new system, we also faced a lot of challenges. The first and foremost problem that we tackled in teaching the practical papers in the OBE system was none other than 'teaching' itself. How to explain 'rule of thirds' in Photography without drawing diagrams on the whiteboard? How to teach 'shutter speed' without showing a video of it on the screen? Is it possible to explain 'types of shots' or 'camera angles' without classroom teaching? How can students be made aware of Public Service Announcements (PSAs)? How can 'focal length' and 'types of lenses' be explained? There were a lot of questions.

The second trouble was concerning evaluation. How to evaluate a student in the Outcome Based Education (OBE) system? What should be evaluated? What criteria should be used in the case of practical courses? What kind of questions should be formulated and asked in the Viva voce examination? Are the formulated questions capable enough to evaluate a person's technical knowledge or subject knowledge in an examination conducted in less than one hour?

The application of the OBE system at different levels of learning a subject was another problem. It meant, where should the OBE be applied first? Is it in teaching or in evaluation or in the entire curriculum itself?

Facing the Challenges

After a long discussion, it came to our awareness that the application of the OBE system in Communication and Media Studies was possible only by demolishing the existing system and constructing a new one in its place.

After spending more than ten days of discussions on the syllabus, a new OBE syllabus was created. The outcomes of each course were reconstructed for effective attainment and measurement. The instructions to achieve the outcomes of the practical courses were formulated and directions were given to evaluate the continuous assessments (CAs). The syllabus revision is the cornerstone on which the foundations of the OBE system in Communication and Media Studies was built.

The main discussions at the time of curriculum revision were on the modification of the course outcomes. To evaluate an outcome, it should be

OBE does not
enchain all students to
one evaluation criteria.

Many difficulties were
faced but solutions
were found in teaching
practical papers.

measurable. That means, immeasurable verbs like 'understand' and 'remember' should be replaced with measurable verbs like 'analyze', 'create' and 'evaluate'. For example, after the completion of the Photography course, a teacher can easily evaluate the students based on their levels of achievement. The intention behind the restructuring of the syllabus is the creation of a learning environment that supports learning activities that are appropriate to achieving the desired learning outcomes.

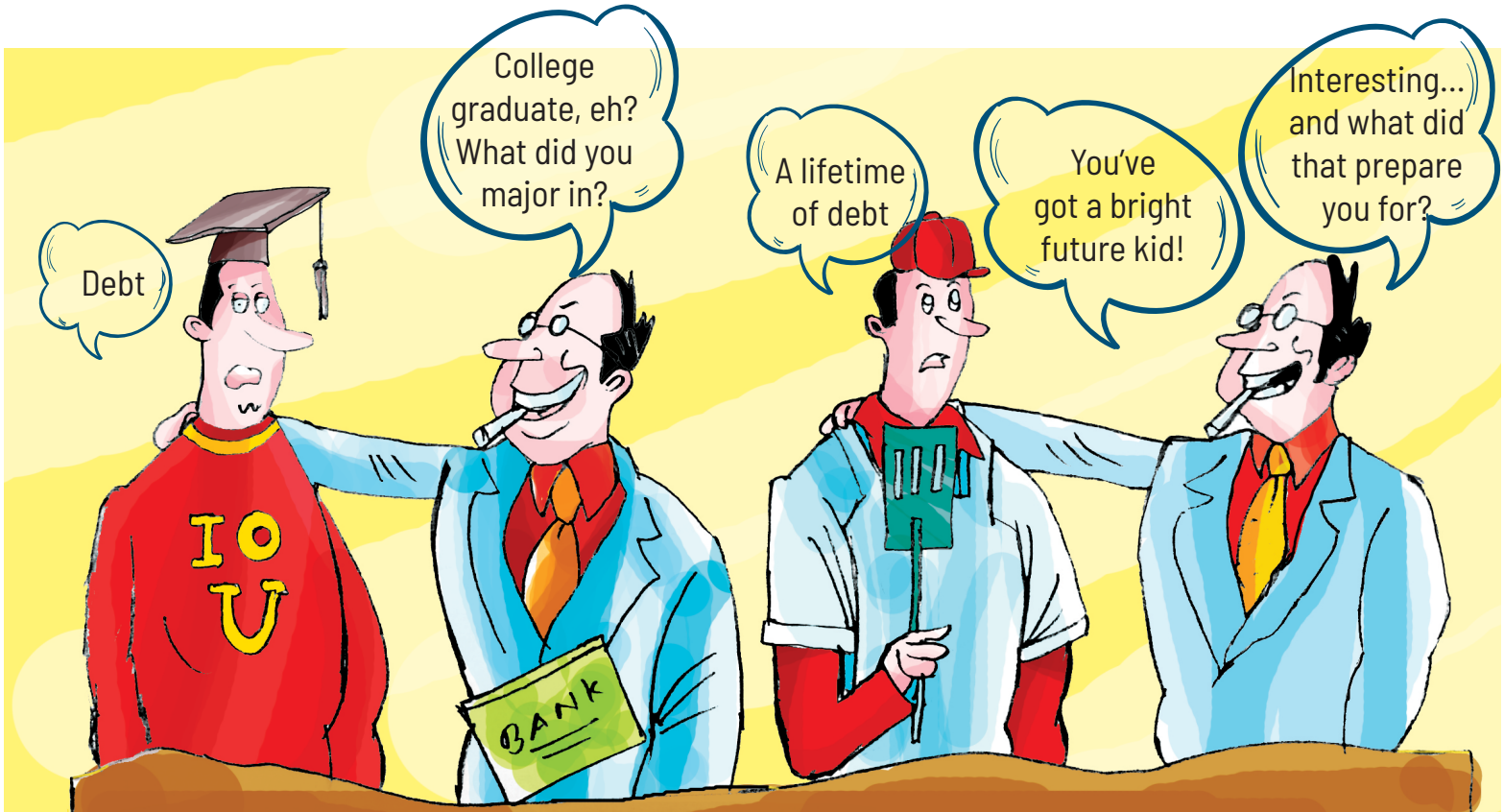
The implementation of the OBE system helped us a lot in teaching practical papers like Photography, Videography and Editing, etc. For example, in order to teach 'slow shutter speed', we were used to explaining the same to the students and showing them videos of the photos taken near some streams. But in the OBE system, in order to learn it, the students actually visited a nearby stream and took slow shutter photos of the stream. In order to learn 'high aperture', the students took photos of the sun during the noontime. Similarly, they took photos to learn 'high shutter', 'depth of field', 'white balance', 'rule

of thirds,' etc. They also learned photo editing by editing their own photos, designing posters and brochures, etc. The Videography and Editing course urged them to produce some videos by themselves and understand the types of shots, camera angles, editing techniques, etc. All these were made possible because of the freedom, flexibility, and excitement provided by the OBE system. Unlike its predecessor, OBE does not enchain all students under one evaluation criteria.

By the time our students finish their PG, they will have enough and more experience to be employed in reputed firms across the globe. The works of the students are assigned and evaluated to match industrial standards. For any course in the stream of Arts and Humanities, especially the practical courses, OBE is the best possible way for learning. Although it may seem chaotic in the beginning, with proper planning and an enormous amount of patience and perseverance, a teacher can perfect the art of being a facilitator in the OBE system.

Fr Sobi Thomas Kannalil is an Assistant Professor and Head of the Department of Communication and Media Studies. He is also a priest in the Catholic Diocese of Kanjirappally.

“



OBE AS PERCEIVED BY MCMS DEPARTMENT



Dr Michael Puthenthara
michael.puthenthara@gmail.com
+91 9961344664

The contemporary emphasis on Outcome Based Education (OBE) could be appropriately perceived in the context of the National Education Policy (NEP) that education is being currently discussed at the national level as a comprehensive framework to guide the development of education targeted for implementation sooner than later. At the level of higher education, OBE could also be correctly considered as a firm step in bringing about, as well as, ensuring quality standards underlined by a new approach different from traditional models of instruction.

The novelty or the differential advantage of the new paradigm is that OBE is a student centred instruction model measuring student performance through outcomes. Outcomes are the results of the learning processes. More specifically, they are statements regarding what a student can do and what he/she understands contextually as demonstrated at the end of the learning processes. These results are knowledge, skills, attitudes and values that are to be manifested within a particular frame of reference. In other words, knowledge is applied and skills developed into competencies. At the same time, values harmonize with those of the society and the workplace.

Competencies can be several. However, what OBE envisages are three types of competencies such as

- a. Pragmatic, meaning knowing how to do things and the ability to take decisions;
- b. Fundamental, that is, understanding of what one is doing and why;
- c. Reflective, implying learning and adapting through self-reflection as well as applying knowledge appropriately and responsibly.

Differently stated, the focus is on output rather than input. But this does not imply that the knowledge base of a discipline is neglected. However, it underlines the necessity of striking a balance between conceptual and practical relevance.

OBE is an assessment-driven system, operating through the setting up of standards. They make up the parameters that guide the learners about values, attitudes, knowledge and skills expected from competent professionals. Therefore, the outcome envisaged ought to be explicit, transparent, distinct and separately considered so that students need to understand what is being assessed and what they are expected to achieve. Naturally, OBE assessment tools are more learner centered than the traditional forms of assessment. However, there is no single style of teaching or assessment; instead, classes, opportunities and evaluation should all help students achieve the specified outcomes.

Two broad types of assessment are identified: formative and summative. Both are designed to improve the quality of the learning experiences of the student. Formative assessment refers to the collection of information

- **Competencies**
- **OBE is an assessment-driven system**
- **Two broad types of assessment**
- **Three parameters measure the progress of the students**
- **Structuring the learning outcome**
- **Rubrics for assessment of outcomes**

about student learning during the process of learning and teaching. This happens on a continuous basis.

Summative assessment takes place at the end of a module/ course, traditionally taking the form of an exam. Arguably, OBE reference is to criteria, meaning thereby, the learner's achievement is measured against a set of predetermined criteria which have no relation to the achievement of other learners.

Three parameters measure the progress of the students in the OBE model.

They are: Programme Educational Objectives (PEOs); Programme Outcomes (POs) and Course Outcomes (COs). PEO encompasses broad statements describing the career and professional accomplishments that the programme prepares the students to achieve.

Naturally they are measured after the completion of the programme through employer satisfaction survey and alumni survey done yearly. Placement records and high education records are included in these efforts. On the other hand, the Programme Outcomes (POs) are narrower

descriptions which the student is expected to know and do by the time of completion of the course.

Lastly, Course Outcomes (COs) are measurable parameters which evaluate students' performance for each course in every semester. Institutions must have the competence to decide on methods of assessment according to what is appropriate to them. Assessment tools to measure COs include mid-semester and end-semester exams along with assignments, project work, presentations, employer/alumni feedback, etc.

Structuring the learning outcome: The whole learning design suggested by OBE is based on the 'Bloom's Taxonomy', proposed by the American educational, Psychologist, Benjamin S. Bloom as far back as 1956 (modified later by others). Therefore, structuring the learning outcome with the Bloom's taxonomy as a framework is vital.

According to it, the learning plan for the students to achieve expected outcomes envelope three learning domains, such as cognitive, psychomotor and affective levels.

Authors Briggs and Tang have identified three versions of OBE:

1. Developed in the 1980s and the 90s, the first version concept of OBE is associated with William Spady, according to whom OBE means clearly focusing and organizing everything around what is essential for all students to be able to do successfully at the end of their learning experiences, that is, to be successful after they exit the educational system. There are two types of outcomes, e.g. 'exit outcomes' and 'enabling outcomes.' While exit outcomes represent the culmination of the student's career, enabling outcomes provide the key 'building blocks' of learning. Spady's OBE paradigm is based on three premises and four principles:

The premises are:

- i. All students can learn and succeed, but not on the same day and not in the same way;
- ii. Successful learning promotes even more successful learning;
- iii. Institutions control the conditions that affect directly successful learning.

The Principles are:

- a. Clarity of focus on culminating outcomes of significance;
 - b. Expanded opportunity and support for learning success;
 - c. High expectations for all to succeed;
 - d. Design down from the ultimate, culminate outcomes. Each of these principles are interlinked, e.g. given appropriate opportunities, students can achieve high standards, which is linked to high expectations. In order for an educational system to be outcome based, these four principles must provide its philosophical foundation. The two approaches in the OBE paradigm are: transitional (traditional) and transformational. The former emphasizes mastery of subject related academic outcomes and the latter emphasizes long term, cross-curricular outcomes that are related directly to student's future life role.
2. Ensuring accountability. OBE is adopted to provide evidence of accountability to meet the needs of accreditation agencies and

external stakeholders such as the government and the employers. Accountability requires quality measures, performance indicators defined as inputs and outputs.

3. In the third version of OBE, learning outcomes are used for the sole purpose of enhancing teaching and learning. In this model, teachers must first clearly state and communicate the intended learning outcomes (ILOs) and establish minimum acceptable standards for success. Thereafter, instructional strategies are selected that will help students to gain the desired skills, knowledge or values. Teachers must also choose assessments that are constructively aligned with the learning outcomes and provide evidence that these have been achieved.

Cognitive domain is all about the knowledge base of learners. Knowing some fact, comprehending some theory, using previous knowledge for solving problems or creating something new are activities at the cognitive level.

To be specific, it implies knowledge, comprehension, application, analysis, synthesis and evaluation.

Remembering is the lowest, and creating the highest level of cognitive attainment. The operative words at this level are 'analyze', 'distinguish', 'predict', 'investigate', 'criticize' and 'appraise'. At the psychomotor level, learning hands-on-skill is the objective. The traditional 'motor' skill is extended beyond combining it with thinking. The levels reached are imitating, manipulating, executing, articulating and naturalizing.

The key words are 'demonstrate', 'complete', 'show' and 'calibrate'. On the other hand, in the affective domain, the focus is on the qualities of feeling and building attitudes of a learner. It involves receiving, responding, valuing, organizing and characterizing. The action verbs are 'act', 'display', 'influence', 'solve,' and 'practise'.

Rubrics for assessment of outcomes

Question 1:

Marketing Strategy -
ORTHOHERB

1. Marketing Strategy, concept and application to ORTHOHERB product;
2. Target market of the branded

3. Ayurvedic product;
3. The differential advantage of the brand;
4. Differential advantage of the brand vis-à-vis other brands of the same category;
5. The great idea and USP;
6. Significance of marketing strategy for advertising.

GRADE: A+ = 1,2,3 and more; A = 1,2,3; B = Any three; C = Any two; D = any one.

Question 2:

1. Target segment appropriate to the product, Orthoherb.
2. Demographic and Psychographics of the segment;
3. Segmentation criteria;
4. Hierarchy of needs fulfilled by the brand;
5. Why segmentation?

GRADE: A+ = 1, 2, 3,4; A = 1,2,3; B = 1, 2 with detail; C = 1,2 no details; D = 1.

Question 3:

1. Concept of positioning applied to brands;
2. Positioning in the mind of consumer, not in the product nor in

- the strategy;
3. Characteristics of Differential advantage;
4. key steps in positioning;
5. Positioning out to be simply stated and consistent;

GRADE: A+ = All five answers; A = First four answers; B = any three; C = Any two; D = Any one

Question 4:

1. The concept of 'Hierarchy of Needs';
2. Elaboration of AIDA, as a planning model and the checklist of an advertisement;
3. Which need / needs specifically motivate in buying a Maruti Esteem car.
4. Alternatives to positioning.

GRADE: A + All the four answers; A = 1, 2,3; B = 2, 3; C = 2 in detail; D = any one.

Question 5:

1. A radial tyre and its relevant facts;
2. The great creative idea that emerges from the facts;
3. Creativity is more than a summary of facts;

- Creativity is more than innovation.

GRADE: A+ = All the answers; A = 1, 2, 3.; B = Any two answers; C = any one; D = 4TH answer.

Question 6:

- Prepare the profile of a full-fledged advertising agency;
- Emphasize the strength of the agency – Client servicing, Creative department, Media Planning and execution, Production Department, in its various sections, such as Film making and Event management, Public relations.
- Two of the outstanding advertisements – commercial and in print it has so far created.
- Names of persons who are behind the agency.
- Its geographical distribution within the country.
- Collaboration with foreign agencies – abroad.

GRADE: A+ = All the answers; A = 1,2,3,4; B = 1,2,3. C = 1,2., D = 1.

Question 7:

- Full-service agency, describing

- various functions in detail;
- Creative agencies, their responsibilities;
- Media/specialized agencies;
- In-house agencies;
- Social media agencies;
- Agency compensation.

GRADE: A+ = 1,2,3,4, A = 1.2.3; B = 1,2,5; C + Any two; D = any one.

Question 8:

- Two fundamental appeals – Rational and emotional;
- Major appeals – Fear, Humour, Sex, Music, Scarcity, with examples;
- Sex appeal used in automobile advertising, a critical evaluation;
- Ethical considerations.

GRADE: A + = 1, 2, 3. A = 1,2; B = 2; C = 4

Question 9:

- Over dependence on cine actors and other stars is harmful to the growth of professional advertising;
- Suffers from ‘Vampire effect’ –

Dr Michael Puthenthara is author of the books ‘Perspectives of Public Relations’, ‘Advertising’, ‘Profiles in Journalism’ and ‘Environmental Reflections’. Translated over 32 books from different languages including Sukumar Azhikode’s ‘Tatvamasi’.

- The celebrity remembered, but the product/brand forgotten;
- Use of celebrities mainly serve the purpose of drawing attention of the viewer/reader to the product;
- If the celebrity suffers a setback, it will affect the product as well.

GRADE: A+ = 1, 2, 3, 4; A = 1, 2,3, B = 1, 3; C = 2.3; D = 4.

Question 10:

- Advertising copy (content) associated with a characteristic of the product / brand
- Characteristic may be particular usage, a specific attribute, price-quality relationship.
- Above all, the characteristic should be related to the benefit of the product to the purchaser.
- Content should also relate to a specific communication task that should be accomplished among a defined audience.

GRADE: A+ = 1,2,3; A = 1,2, ; B = 2, 4; C = 4; D = 4.s

OBE IN COMMUNICATION AND MEDIA STUDIES



Mr Eapen Alexander
eapen.alexander@mariancollege.org
+91 9633264208, +91 8078394024

The introduction of Outcome Based Education (OBE) in the field of Communication and Media Studies is a much needed upgrade for the ever dynamic discipline. With rapid paradigm shifts taking place in the field of communication and media studies globally, the Indian system fails to deliver the desired quality of graduates who can cope with change. Due to lack of practical experience, innovation and skill acquisition, millions of Indian graduates and postgraduates struggle to find their desired jobs as employers find them 'unemployable'. But the implementation of OBE is the beginning of the end of such problems.

With rapid changes taking place in the field of Communication and Media Studies which is complemented by the revolutionary and unending rise of the fifth estate where the bar of standards is raised so high, many graduates would find it hard to survive. Such changes also leave a lot of room for highly skilled employees and entrepreneurs who are able to take risks and try new things. Indian students are capable of doing that and they perform tremendously abroad because the international standards enable them to be self-reliant and motivated. However, the Indian teacher centric system does not help students to discover the true potential within themselves, and as a result, they fail to match the standards set by the employers.

The dominant role of a teacher in a classroom often eclipses the potential of a student. Teachers in the Indian system are forced to dictate the lessons and lay out uniform learning and assessment plans for students. The problem with such uniformity is that the students, especially in the Humanities and Arts stream, heavily depend on creativity and innovation. Such uniformity does not give enough chances for a student of Communication and Media Studies to gain the

actual essence of the programmes offered by the discipline. Pragmatism is fundamental for the successful attainment of the benefits of the programmes in this discipline. Majority of the courses cannot be taught within the confined space of a classroom; the students require a lot of outside practical experience in order to apply what they have actually learned. Such exposure will also sharpen their skills which are fundamental for succeeding in this field.

The Indian system of education deprived generations of students from attaining the true sense of education, and as a result, they often become unemployable. It is not entirely the fault of the students from India if they fail to meet the expected quality. The Indian system, for decades, evaluated a student based on uniform and obsolete evaluation criteria which only focused on reproducing what was taught in the classroom, rather than creating something new based on their skills. The students were evaluated for their memory power or their knowledge level instead of assessing what skills they had actually acquired and what they did with them. Such monumental misjudgement has resulted in 80% of Indian graduates being unemployable according to

a 2019 report by the employability assessment company 'Aspiring Minds'. Out of the several observations made in the report, the most important was that subjects were taught in a very theoretical manner in colleges, 60% of the faculty did not talk about the application of concepts in the industry and only 47% of the students attended any industry talk. Although this study was conducted in the field of Engineering, it is very much relatable and relevant to almost all disciplines of the Indian Education System.

This is where OBE plays a critical role. It helps to eliminate the aforementioned problem to an extent. OBE enables all courses in the discipline - Communication and Media Studies - to be measurable, reliable and productive. The OBE system enables the students to be more pragmatic when they deal with theoretical courses. For example, in the traditional system the course Print Media Journalism predominantly focused on learning the history of newspapers, important principles of Journalism, important personalities of Journalism and important dates, etc. Although such details are important, they alone do not make a student employable or innovative. Change begins when questions are framed in such a way that

students get to apply their knowledge and create something out of it. OBE does not evaluate students based on what they know or how much they know; but rather by what they do with their knowledge.

The experience of teaching the OBE system was unique, rejuvenating and equally tiresome. OBE was more of an unlearning process than a learning process. It was not at all easy to unlearn core doctrines of an educational system that is still deep rooted in the country. Transformation from a teacher to a mentor and facilitator did not reduce workload; in fact, it actually increased it. The attainment of course outcomes are measured based predominantly on the assignments and other works done by the students. It was not at all easy to assess and give timely evaluations to the students based on their progress in attaining the course outcomes. Although the NEP 2020 allows peer evaluation and self-evaluation for the students, the presence of a teacher is absolutely vital for responsible assessments. But when compared to the benefits students gain from this system, this is something one happily accepts.

Instead of asking for the important

- **OBE as a catalyst of a much-needed change**
- **A new era of learning Challenges in Outcome Based teaching for theoretical courses**

principles of Journalism in the course Print Media Journalism, the students were asked to write news articles from information which was given to them. This not only allowed the students to learn and sharpen their news writing skills, but also forced them to use their wisdom to carve out news. Here, the intellectual and manual effort of the students were on a par and found harmony. So, a student who successfully completes this course walks out as a sharp reporter as well as a prudent and ethical editor too.

The struggles faced by the teachers can only be reduced with more training and experience. Just like the students, the teachers also have a long way to go in the OBE system.

OBE is going through a stage of metamorphosis. It would take years for this system to finally replace the old system and for the teachers to step down and allow the students to take reins of the learning process. OBE was everything needed in the field of Communication and Media Studies. This change can revolutionise learning and change the perspectives of education. With enough time and effort, India might be able to end the heart breaking history of brain drain by enabling its citizens to find and create jobs in the country itself.

Mr Eapen Alexander is Assistant Professor, Department of Communication and Media Studies

“



“Kinesthetic is a learning style. Auditory and visual are learning styles. Cheating is not a learning style.”

A TRYST WITH OBE



Ms Suzanna Oommen
suzanna.o@mariancollege.org
+91 9447573538, +91 9495617848

Glossary

POs– Programme Outcomes (common to all similar Programmes like all UG, all PG, etc)

PSOs– Programme Specific Outcomes (different for every Programme, but will help to attain POs)

COs– Course Outcomes (different for every course, but together would help students to attain PSOs)

Formative Assessment– Any test to gauge the attainment of outcome(s) with an aim to improve the score by giving continuous feedback, additional exercises and activities

Summative Assessment– A final evaluation after the completion of the teaching and learning activities

Steps
that can be
followed by a
novice to
implement OBE.

Step 1 - Sustain motivation that does not wane.

“Great things will never come from your comfort zone; progress only happens when we make efforts to do something different. Change before you have to. Now, we need to completely move towards Outcome Based Education”. When the Principal of our college tried to wheedle us teachers towards this seemingly inevitable move, there was a silence that resonated the mixed reactions within each one of us.

But that was just the beginning. The decision by the college was followed by a plethora of deliberations, discussions, expert talks, training, workshops, circulation of literature related to OBE, so on and so forth, in order to understand the concept of OBE. Don't worry even if you have not had any of those.

If you have decided to move ahead, you are done with the first step.

Step 2 - Understand that pessimism kills motivation.

What exactly does 'implementing OBE' mean to the teachers and students? Why is the

conventional method of teaching and learning not considered outcome based? What different methods have we to follow now? Will it actually benefit the students? Can it be implemented across disciplines? If similar questions linger in your head, brush aside all these questions for now. They can be addressed later.

Step 3 - Unlearn a bit to take a leap forward.

We no longer evaluate the students based on what they have just learnt as per the syllabus. We try to assess what the students are able to do, based on what they have learnt. So, the questions are framed in such a way as to evaluate the skills acquired and to test whether they are able to apply what they have learnt.

In short, we need not test the students to see if they know a formula, or define a theory, or explain a process or list out some obvious characteristics. We go a step forward in the evaluations – we test to see if they are able to apply all those in real-life scenarios.

We need not teach them anything that has no practical value!

Step 4 - Ponder and focus.

At the outset, every teacher must list down the practical use or applicability of each of the courses taught. They should look at the syllabus content, go through each module, list why those modules are important, know what the students gain by learning them and what they are expected to do with the knowledge gained. Every module of the course should go through this process. These statements listed can be refined later to frame the expected Course Outcomes (COs)*. The expected outcome given for each of the modules of a course should be in such a way that, once all the modules are completed, the student's course outcome level can be evaluated.

(*The outcome statement ideally would contain a verb from the higher order cognitive dimensions of the revised Bloom's Taxonomy. (Anderson and Krathwohl, 2001, pp. 4–5)

Example

On completion of the course the student would be able to

- create....
- formulate....

- calculate.... etc.

Step 5 - Aligning the COs and PSOs

This is to see if a student who completes all the courses of a Programme would be able to achieve the expected Programme Specific Outcomes. Now, the PSOs are a set of measurable attributes that the students should possess after they have completed all the courses of the Programme.

If not, add new courses that would address those requirements and delete those courses that do not contribute to the achievement of PSOs. Also, modify the modules within the courses to see if they help to achieve the respective COs, and that those COs are in line with the PSOs.

Step 6 - Put your heads together.

To align the COs with the PSOs, all the teachers of the department, the BOS members, the advisory board of the BOS and all stakeholders should put their heads together to frame the PSOs which in turn should be aligned with the POs that actually emanate from the vision and mission statement of the college.

Step 7- Let us get it straight – the ideal scenario

The vision and the mission statements of the college give shape to the Programme Outcomes. All the Programmes offered by the college would be aimed at achieving those POs. Each Programme in turn would be designed by a set of PSOs decided by the individual departments offering that Programme.

They would also decide what all courses need to be offered under that Programme for the students to attain the set PSOs. Once the courses are determined, the individual teachers handling those courses frame course outcomes and decide what modules come under that course for the students to achieve those COs. Go to step 4 and fine tune your course and COs.

In a nutshell-

The teacher in the class is now a facilitator who motivates, guides and mentors each student to achieve the course outcomes of the taught course through continuous/formative assessments. The completion of the course would be marked by the summative assessment to evaluate the level of attainment of all the COs.

Example of how a course is taught in the class under the OBE system

Course Name1: Business Communication

Course Outcome1: Analyse and apply the elements and necessary conditions for effective communication.

Teaching-Learning activity 1

Find out and present in the class videos/recorded talks that emphasise different elements of verbal and non-verbal communications.

Discuss in the class what has made them effective or ineffective.

Teaching-Learning activity 2

Students are divided into seven groups, each representing one of the seven Principles of communication. They make a video/skit to show how effective communication is done, emphasising the principle they represent.

Formative Assessment question 1

In the given video what are the verbal and non-verbal cues that have made

the communication effective? Identify the barriers, if there were any. How can the given communication be made more effective?

Rubrics for awarding grades A to F where A is the best and F is the worst

A - If all the verbal and non-verbal cues, barriers etc., are identified, and good suggestions are given.

F - If no cues etc., are identified. Inappropriate or no suggestions are given.

Formative Assessment question 2

Video record a speech of yourself using all the aspects of effective communication.

Rubrics: (Excellent to Poor)

Excellent - If verbal language, gestures, facial expressions etc., are appropriately used.

Poor – If language is poor, if there are no gestures or many barriers are present, etc.

Ms Suzanna Oommen heads the Department of Economics that offers the BA Applied Economics programme.

Summative Assessment question 1

You are on an interview board to select a candidate for the post of public relations executive. Describe in detail the person whom you would select and justify your selection parameters. (Hint: Look for various verbal and non-verbal cues. CO1)

Summative Assessment question 2

Mr Roshan is a successful marketing executive working for an automobile company. Describe in detail how he would be communicating to his customers.

(Hint: Look for various verbal and non-verbal cues. CO1)

COROLLARIES WITNESSED BEFORE THE EYES BECAUSE OF OBE



Dr Fr Shaiju K.S.
fr.shaiju@mariancollege.org
+91 9605108006

This is the narration of my experiences of seeing my students become publishers, entrepreneurs, moneymakers and marketing experts as a result of the Outcome Based Education system.

It has been one decade since I became a teacher, and I have taught fourteen batches of students on the serene campus of Marian College Kuttikkanam. Throughout these years, my focus as a teacher was to learn things from different sources and share that knowledge with my students through various means. I believe that my students learned something from what I shared with them. I, however, never thought of the wide gap between learning and doing until the concept of Outcome Based Education came into the scene.

Purpose of OBE

Many students stand perplexed as the bight between learning and doing keeps on widening, and they realize that the theories they learnt in the classrooms do not yield themselves to real-life situations. Consequently, those students who step straight into the industry from the campus, feel like fishes out of the water and are unable to perform as per the expectations of the industry and the society.

However, with the introduction of the revolutionary concept of Outcome Based Education, the gap between academia and industry, and theory and practical, has started to become

smaller and smaller.

Results of the implementation

My experiences with the implementation of Outcome Based Education are positive. I have seen my students moving forward with a dream and putting all their efforts into realizing those dreams. Here are some of my experiences and findings related to the introduction/ implementation of OBE:

My first experience is the pleasant transformation of my own thinking pattern. From the misconception that a teacher's knowledge of a subject is greater than that of the students', I have come to the realization that there are innumerable other sophisticated quality sources of information on the same topic that I am engaging in. And so, a paradigm shift of attitude from that of being a tutor of the assigned course to that of an architect of the learning activity of the subject, has inevitably subdued my mind.

The second instance of the impact of OBE is the fire that was ignited in the hearts of my students which triggered them to research various cultural sources around them, and have their findings published in leading period-

- ↘ The bight between learning and doing was reduced.
- ↘ The tutor became an architect.
- ↘ Students became authors in leading dailies and magazines.
- ↘ Mere listeners became leaders and entrepreneurs.

icals and magazines. One of the challenges given to the Hospitality Management students as part of their course - Cultural Heritage and Tourism Management - was to generate knowledge which they would share with the world. Students explored a number of unexplored cultural themes such as destinations, local cuisines, folk games etc, and 21 out of 25 students got their articles published in leading dailies and magazines.

My third experience was witnessing the birth of leaders and organizers from among those students who had hitherto been silent participants in seminars and workshops that were organized by me periodically. Imple-

menting the new system of OBE, students were grouped into four according to the four major themes of their course - India Classical Dance, Indian Classical Dance, Indian Paintings and Folklore - and were asked to come up with ideas and plans and effectively share their knowledge. Astonishingly, each team organized webinars, exhibitions, expert lectures, quizzes and games based on their themes, and made the learning experience of the entire class a truly memorable one. I am assured that the teaching - learning process would not have been so productive, and that no leaders would have emerged had the normal pattern of teacher - centred teaching process been followed instead of OBE.

My fourth and final experience was the emergence of student entrepreneurs ensuing from an activity that had been assigned to them. Students were asked to develop and promote a cultural product, either of their own or of others. Some of the students explored their talents and initiated entrepreneurial activities such as portrait painting, art and crafts, cooking, modelling, beauty enhancing and photography. Some others promoted their family ventures through innova-

tive marketing strategies and received the attention and appreciation of their near and dear ones as well as that of the public, and even earned income. This experiential task would enable students to think, design, initiate and implement entrepreneurial ideas as well as marketing plans when they confront real-life situations in their life ahead.

Conclusion

In short, through OBE my students conducted researches and got their work published, started entrepreneurial activities and earned money, organized several webinars and exhibitions, and became leaders and organizers while they were still on the campus.

Dr Fr Shaiju K.S. has been working as Assistant Professor of Sociology in the Postgraduate Department of Hospitality and Tourism since 2008.

“



“...And this is where the teachers go to get away from me!”

MY EXPERIMENTS WITH OBE OF OB



Mr Arun George Joseph
arun.george@mariancollege.org
+91 98465 19772



In every young person a point of goodness is accessible, and it is the primary duty of the educator to discover that spot, that sensitive cord of the heart, so as to draw out the best in every young person.

Don Bosco

'Organizational Behaviour' is a Management subject, invariably forming part of the pedagogy in every Business Administration/ Management program the world over, irrespective of the type/ ranking of the institution. We all knowingly or unknowingly apply OB strategies in our personal and professional life.

This article throws insights, based on the first hand experience of implementing it, into 'Outcome Based Education' for Organizational Behaviour for postgraduate students in the Hospitality Management Program, in Marian College Kuttikkanam (Autonomous), an exemplary institution in innovative practices, and a forerunner in Outcome Based Education

OB (Organizational Behavior or Organisational Behaviour) is a Management subject forming part of the pedagogy invariably in every Business Administration / Management Programs the world over, irrespective of the ranking of the institution.

Organizational Behavior is the study of human behavior in organizational settings, the interface between human behavior and the organization, and the organization itself.

Organizational Behavior is the study of both group and individual performance and activity within an organization. This area of study examines human behavior in a work environment and determines its impact on job structure, performance, communication, motivation and leadership, etc.

Organisational Behaviour studies the mutual impacts of individuals-groups-organisation, and how its various facets / aspects could be improved for the success of the organisations.

We all knowingly or unknowingly apply OB strategies in our personal and professional life, be it in our homes,

Clear plans, timely and continuous evaluation, FLIP learning and strong clarity about outcomes are very essential in the OBE implementation. OBE is a learner centric approach and the course facilitator has to walk with the wards, like a shepherd leading his flock to green pastures. Understanding that learning is highly personalised and ever evolving, accepting our vulnerability, and having a learner's mind, is crucial in the OBE implementation. It is like keeping your eyes and ears open for new knowledge, revelations and truths.

offices, religions, politics or friends circle.

This article is a kind of FIR which throws insights into the experiments and strategies adopted in implementing outcome based learning for Organizational Behavior for the Postgraduate Management students.

It is said that management comprises five aspects: Planning, Organising, Staffing, Directing and Controlling. Let us see how the OBE of OB was done, by going through these five steps of management.

Planning

Begin with the end in mind, and reverse engineering is the key for planning OBE.

The outcomes were prepared in consultation with the Department Council, notable alumni, industry experts and peers in other top management institutes, and fine tuned further in consultation with peer reviews. The following outcomes were identified and finalised months before the syllabus was finalised. The COs (Course Outcomes) were clearly mapped with PSOs (Programme Specific Outcomes), POs (Programme Outcomes)

and the Vision-Mission Statement of the institution.

The Pedagogy and Methodology of various institutions the world over, and various publications, texts and web resources were referred to in order to make sure that we got the best out of our efforts. It took almost a year's effort and various levels of discussions to have the outcomes tailor made.

- Analyse individual and group behaviour, and understand the implications of organizational behaviour on the process of management.
- Apply different motivational theories by understanding personality types and comparing motivational strategies used in a variety of organizational settings.
- Evaluate the appropriateness of various leadership styles and conflict management strategies used in organizations.
- Understand how organizational change and culture affect working relationships within organizations.

- Design strategies to manage professional and personal life in Hospitality and Tourism organisations.

The challenge was in ensuring that the needs and aspirations of various interest groups had to be met without compromising on the learning objectives, as well as managing the course completion in time and with quality, without creating additional burden on the student community, and incorporating all major concepts and ideologies, inevitable for achieving the course outcomes of the subject.

Organising

Well begun is half done. Thanks to the course plan prepared for 90 instructional hours which gave ample room for preparatory sessions, learning activities, learning resources, evaluation plans, pre-class, in-class and post-class assignments for each day, links to relevant audio visual and text resources, hard and softcopies of learning materials, revision sessions, mock tests and evaluation rubrics.

As we all know, the Covid 19 pandemic caused dark clouds of uncertainty to loom over the education scenario the world over.

The course plan was made in such a way as to be able to use it irrespective of whether classes were online or offline. Esprit de corps was the key here. After all TEAM implies that together we achieve more. You need help and support from all around you in the successful implementation of OBE. The divine Providence lent us a helping hand through our near and dear ones, for, education is a process of kindling a light in the darkness.

The directions, supports, corrections and valuable suggestions from the college authorities, from the Controller of Examinations, the IQAC, peers in the Department, ‘buddy’ teachers for the subject and alumni etc, were crucial in incorporating things into a well structured course plan which could be used effectively in online as well as offline classes.

Some of the activities were designed keeping in mind the ‘Work from home’ aspect and its implications. In fact, the support of the family was also crucial in learning. Thanks to the in-house software www.mcka.in integrated with a customised version of the Moodle, all assignments, activities, online sessions and formative assessments could be done with great ease from remote

destinations by the students.

Staffing

The learners batch comprised 25 students who were divided into groups of five each ($5 \times 5 = 25$). For ease of two way communication and better coordination, a control group was created with representatives from each group. A WhatsApp group was created, and regular meetings and discussions were done with this control group (five representatives and the course facilitator) regarding pre-class, in-class and post-class so as to make sure that learning was always on track and went on as planned.

Micro groups were very crucial in understanding gaps/ bottle necks and plugging such issues without delay. This also ensured peer learning and interactions among students.

Students who were otherwise introverted, shy or reluctant to speak up/ contribute in a group would easily gel well and interact in a small group. The course facilitator could also understand and cater to the needs of individual students more deeply when interacting with micro groups. For every session plan, there were individual as well as group assignments. So, to

a great extent, social loafing, deviant behaviour, imbalances in resource allocations and awards, etc., could also be avoided. Virtual groups were created using multiple web resources including Google meet/Zoom/Big-BlueButton/Google classroom, etc.

As time progressed, we could create separate plans for slow learners as well as advanced learners.

The best result was that students were able to analyze and evaluate their own behaviours during these activities. Thus, the OB principles and the course outcomes connected with individual-group-organisation were learned by practice itself.

Directing

Reinforcement, Reiteration and Re-alignment of course outcomes is the 'mantra' directing towards the OBE based learning.

FLIP learning and a strong clarity about outcomes are very essential in OBE. It is a learner centric approach, and the course facilitator has to walk with the wards, like a shepherd leading his flock to green pastures and protecting them in the dark valleys.

Understanding that learning is a process that is highly personalised and ever evolving, accepting our vulnerability and having a learner's mind, is crucial in the OBE implementation. It is like always keeping your eyes and ears open for new knowledge, revelations and truths.

It is an enriching experimental experience, more of journeying together with the students as a student and mentor, with the zest of a kid to find new treasures. Remember, 'The child is father of the man'. We have miles to go in learning before we can sleep. Continuous assessment before, after and during classes each day is the only way to ensure and reinforce the achievement of outcomes. Otherwise, learners may get derailed easily from the achievement of course outcomes.

There would be a pre-class reading material and assignment, which had to be mandatorily completed before the students came to the class. This would help them know what they were going to learn, create doubts and inquisitiveness in their minds and make them interact. Besides, it gave a lot of new learning and out of the box thinking to course facilitators too. The in-class activities were designed to be highly interac-

tive, but supplemented with lecture support so as to ensure conceptual clarity. There were post class assignments and extra readings to make sure that the outcome achievement was reinforced. This three tier activity approach aided in leaving no stone unturned.

Controlling

Before, during and after each session/ topic/ activity/ exam, the course facilitator had to make sure that every effort of the learners was focused and re-centred towards the achievement of the course outcomes. Rational and emotional appeals were used in every class so that the students followed the track, and the goal and purpose were clearly met.

A key challenge in front of the course facilitator was to change the mindset of the students so as to make them love learning with a purpose, and not just for the exams - something which had been rooted in their minds due to the flaws in the traditional system of education hitherto followed.

Continuous Formative Assessment, with timely evaluation and qualitative feedback, plays a great role in OBE. Although this puts additional

It is an enriching experience, more of journeying together with students as a student and mentor, with the zest of a kid to find new treasures.

Remember, 'The child is father of the man'. We have miles to go in learning before we can sleep. Continuous assessment before, after and during classes each day is the only way to ensure and reinforce achievement of outcomes. Otherwise, learners may get derailed easily from the achievement of course outcomes.

workload for the course facilitator, the fact is that each answer sheet or activity output is unique - a piece of art which demonstrates the students' best talents.

Exams are a normal assessment procedure to judge a child's learning outcome and not to identify his disabilities and failures. OBE serves the real purpose of exams and is a solution for 'examophobia'.

Summative assessment in OBE is also a learning exercise with ample room for learners to express creativity, out of the box thinking and novel ideas that could change the world. The assessments should never be to check what the learner has reproduced by 'byhearting'. They should be considered as something which could help him/ her apply, analyse, evaluate and create things. Case analysis is a time tested tool for this, but there are many more such tools.

Once the students understand the need and purpose of OBE, we can be proud of carving real gems out of them, and not just paper tigers.

Thanks to the exam pattern of the college with 40% weightage for formative evaluation, a minimum of

three internal exams, and freedom of the faculty to design continuous assignments as they deem fit but well aligned to the course outcomes.

These activities ensure deepened learning as well as sharpen the research skill of young learners. They can never mug up and reproduce something and score marks. The credit goes to the Question Bank, wherein each question is designed to evaluate the achievement of course outcomes, with clear evaluation rubrics.

In order to reduce subjectivity elements in the designing and evaluation of outcome achievements, the 'buddy' system in the college proves really helpful. An expert in the same subject is with you to make sure a better valuation happens that minimises errors of bias and subjectivity.

The best text books and library reference material including those from Pearson and Nlist etc., were given so that students got the most promising achievement of outcomes. They solved cases, went through journal articles, did current affairs analysis, roleplays and many other exercises online and offline. The online sessions were recorded and made available on Youtube.

We have to inculcate inquisitiveness as a key skill in the learners so that they can achieve the higher levels of learning in the Bloom's Taxonomy. It may take extra effort and time, but is really worth it.

Almost 20 assignments (pre-class / in-class/ post-class) were given to the students including, but not limited to Reflective best self exercise, Personality test and debriefing, Simulations, Case analysis, Roleplays, Perception games, Micro group learning, FLIP learning, Filmmaking, Cross team learning, Open book tests, Library Champions, Mindmap, Viva voce and Industry visit for analysis of the OB elements etc.

Mock tests were conducted before the summative exam.

Students were asked to create rubrics for evaluation and do a mock valuation for their own pre assigned teams of five. Each group became a five member valuation team on a round-table and evaluated every five answer sheets together. They in turn gave quantitative and qualitative feedback for each answer. In this way, each student became a teacher and student at the same time, which gave him/ her a chance to sharpen his/her

skills.

This activity helped them to understand the idea of how the process of outcome designing and assessment is done in colleges.

The wards will learn much more effectively for their summative assessment exams as well as to face practical situations in life.

We, as course facilitators, are like the sowers in the biblical parable. OBE helps us ensure that our seeds are best chosen and they are sown in the most fertile land. We also get ample activities to water, nurture, prune, nourish and make sure that the seeds grow into the best and the strongest trees designed for greater purposes.

The comparison between the mustard seed and the kingdom of heaven seems to focus on the outcome. "The kingdom of heaven is like a mustard seed, which a man took and planted in his field. Though it is the smallest of all seeds, yet when it grows, it is the largest of garden plants and becomes a tree, so that the birds come and perch in its branches."

Mr Arun George Joseph is Course Facilitator in Business Administration/Management subjects in the Postgraduate Department of Hospitality and Tourism Management

Together let us create a better tomorrow with the best outcome based seeds; let us continue our experiments with OBE.

“



OBE EXPERIENCES OF FIRST YEAR MMH STUDENTS





First of all, the Outcome Based Education literally astounded me. This was one concept I was not very aware of. To be honest, I was not very convinced about my ability to write answers to outcome based questions. I was in a dilemma. However, our teachers mentored us in a great way. The OBE has raised our level of self esteem. I support the Outcome Based Education in all aspects even though I was muddled at the beginning. Outcome Based Education provides the student the particular skill to apply his/her knowledge in real life. Overall, the new learning process was fun and informative.

Ms Malavika Sunil
malavika.20pmh118@mariancollege.org
+91 92075 71946

Our batch was lucky enough to experience both online and offline classes in the first semester itself. It made us aware of the advantages and disadvantages of both the modes of learning. More than that, our batch got the privilege to experience the Outcome Based Education system for the first time. It is actually one of the best ways to educate and be educated. It was a bit difficult to catch up and follow this pattern as it was our first time. This pattern should have been followed since middle school.

Ms Annu Nelson
annu.20pmh109@mariancollege.org
+91 85929 89904

Outcome Based Education has helped in improving our thinking skills and made us more engaging in demonstrating them. It has enabled us to apply our knowledge in the practical world.

Ms Minnu Maria Jose
minnu.20pmh119@mariancollege.org
77366 84762

Ms Shirin
shirin.20pmh124@mariancollege.org
+91 88489 38204

Outcome Based Education was a new experience for us. This method of learning is very much different from the traditional one. Initially we found it very difficult to practise this method of learning because this involves a lot of effort from the learners' side. Since we had our classes in online mode, we found it very hard to complete the assignments and tasks assigned to us. However, gradually we improved. Outcome Based Education will be more effective in offline mode as it requires classroom involvement activities. The traditional method was mainly teacher oriented or directed, whereas Outcome Based learning is learner directed. The students have

complete autonomy in choosing their way of learning. Creativity, efficiency, skills, etc., play a major role here. Practical knowledge is considered more important than theoretical knowledge.

What to learn is more specific, and students should focus only on that. It has made the entire learning easy. Learners have a clear idea about what outcome is expected of them.

Since we were the first batch who got the chance to experience outcome based education, it was really a challenging and, at the same time, thrilling journey. Our teachers deserve appreciation for their efforts and great support.

In fact, this method of learning should be adopted by every organization. Implementation of this method is definitely going to produce better managers.

Ms Amala Shaji
amala.20pmh104@maeiancollege.org
+91 90614 56171

Ms Revathy V. Raveendran
revathy.20pmh121@mariancollege.org
+91 7907147197

Mr Anix Luca
anix.20pmh107@mariancollege.org
+91 89217 24436

Mr Geo Francis
geo.20pmh113@mariancollege.org
+91 7025778713

“That feeling as a modern student.”All of us have been studying since our childhood, but none of us have ever studied like this before. Our education system was like this: Write what was in the books, and the questions would also be like that. Thus, the Outcome Based Education was a fresh experience for all of us. Like I said, it was our first experience; it tasted bitter at first, but in time the sweetness of it came out, and it made me very happy to be a part of this revolution. The main thing was, we didn't have to learn anything by heart. We just had to understand the concept and write what we understood. This style of learning was very different. This is very helpful for our future too, because when we understand the concepts and the theories, we will not forget them unlike if we had just heard them.

Mr Amal Prasad
amalprasad.20pmh105@mariancollege.org
+91 83308 62971

This is my first experience. It is a totally new method of learning. Outcome Based Education is focused more on self directed learning. Practical knowledge is given more importance than simply learning theory . First of all, we sincerely admire the efforts that our faculties have taken in order to make us more capable in our life. Since

it is self directed learning, students have complete freedom in choosing the method of learning which is apt for each individual. Overall, it is student-centric as opposed to the teacher-centric of the traditional learning pattern.

Ms Anjana Shaji
anjana.20pmh108@mariancollege.org
+91 79945 18484

Outcome Based Education was very helpful to me. This was my first experience. In the beginning I struggled a lot, but later on, I started improving. Earlier, we used to learn only from the textbook, but in Outcome Based Learning, there is no point in just byhearting things; we have to understand the concept and apply it wherever necessary.

Ms Krishna K.B.
krishna.20pmh117@mariancollege.org
+91 85940 52988

“



The wrong answer.

“



IMPLEMENTATION OF OBE IN BASIC STATISTICS



Ms Assanu Augustine
assanu.augustine@mariancollege.org
+91 9745869193

Basic Statistics is a complementary course offered in the curriculum of Bachelors in Computer Applications. This article is about my experiments and experiences regarding the implementation of Outcome Based Education in Basic Statistics. It includes an outline of the teaching-learning practices, assessment, question pattern and evaluation of the course. Difficulties faced during the implementation of OBE are also included.

Basic Statistics is a complementary course in the curriculum of the Bachelor of Computer Applications (BCA) programme. The course intends to give a basic idea about Collection and Presentation of Statistical Data, Measures of Central Tendency and Dispersion, Permutations and Combinations, Probability Theory and Random Variables. It introduces the students to the concepts and logic of statistical reasoning.

The subject endeavours to provide an introductory level practical ability to use appropriate methods of collection of data, employ right analyses, present the data effectively, and apply the theory of probability in correct scenarios. As Statistics finds applications and scope in an extensive range of domains, people use it in their everyday life knowingly or unknowingly.

This write-up solely includes my personal experiments and experiences regarding the implementation of outcome based learning for Basic Statistics. As the first step in the journey, Marian College has taken great efforts to educate the academicians, researchers, faculties and students about Outcome Based Education. Outcome Based Education is a process of restructuring the curriculum, learning

and teaching practices, methods of assessment and criteria of evaluation. By unlearning the traditional kind of 'chalk board' method and being open to innovative and collective learning, we have successfully completed a semester of Outcome Based Education.

This system of education predominantly gives priority to the end product/result accomplished by the learner. So the entire course outcomes have been reworked in such a way that they are measurable and outcome based. After numerous months of discussion and consultation with the department council, subject experts, peer groups and meritorious alumni, the Course Outcomes were finalized, and the mapping of these outcomes with the Programme Outcomes and Programme Specific Outcomes was done effectively.

The finalized Course Outcomes of basic Statistics are as follows:

- Collect and present statistical data objectively.
- Calculate measures of central tendency and dispersion.
- Solve problems of probability, permutations and combinations.

The article specifically demonstrates how the facilitator conducted activities to ensure the involvement of the learner. The specific ways in which outcomes are measured are described. A comparison of the traditional kind of question setting and the outcome based question framing is also presented in the article. The reader will get a clear idea regarding the framing of application level questions based on theoretical results.

- Calculate probability by applying theoretical results.
- Find the probability distribution function, expectation, variance and moments of random variables.

The teaching-learning method was more student centric. A detailed course plan for 90 instructional hours was prepared. The course plan included a proposed time schedule, teaching-learning methods, methods of assessment and evaluation and activities for advanced as well as slow learners. Instead of giving more importance to lecturing, the proposed learning methodologies included a wide range of student centric methods. Some of them were flip classroom, peer discussion and collective problem-solving sessions, etc. and all the activities were designed in such a way that it contributed to the attainment of some desired measurable outcomes.

Let me give an example of an activity assigned to the students as part of the continuous assessment.

The entire class was divided into six groups, each consisting of ten members. The activity comprised two components: a survey part and an anal-

ysis part. The survey part included a selection of a quantitative attribute (e.g. height of students, time-consuming by internet browsing, marks scored by a student, etc.); selection of a proper sample (e.g. first-year graduates in the college, faculties in the institution, etc.) and collection and presentation of the data regarding the chosen attribute (preferably in tabular form). The analysis part included the identification and selection of a desirable measure of central tendency (e.g. Mean, Median, etc.) and its calculation. At the end, each group was asked to submit a report of the activity and present the drawn observations/conclusions. By this activity, I was able to measure whether the students had attained the course outcomes 1 and 2 (mentioned above).

Similar methods of teaching, learning and evaluation were implemented to measure the remaining outcomes. The moodle platform, in-house software mcka.in, visual applications like screencast o matic etc. were effectively utilized for better results.

One of the challenging stages in the implementation of Outcome Based Education was, of course, the preparation of a question bank that included questions of higher taxonomy. We had

to rework all the questions prepared previously. The questions had to specifically contribute to the measurement of the attainment of outcomes. As course facilitators, we realised that instead of memory power, it is the ability of the student to analyse, comprehend, synthesize, apply, evaluate and create that should be examined.

Let me give a model question prepared from the topic 'Probability Theory'.

It was very common to ask the question 'State and prove the addition and multiplication rule of the probability of events'. The learners were supposed to give the exact statement with correct proof. Even though students were free to apply any correct method of proof, the majority of them would produce the same proof which was explained by the course facilitator in the classroom. Let us see how the same concept was framed into a question in the outcome based evaluation process. Consider the following question:

“Rohan speaks truth in 70% of the cases, and Rithu in 85% of the cases. In what percentage of cases are they likely to contradict each other in stating the same fact?”

To answer this question correctly, the learner has to identify the events described in the situation, convert the same into symbolic form, understand the nature of the given events, and apply the addition and multiplication rule for two events. The learner's solution to this question enables the course facilitator to measure whether he/she has acquired course outcomes 3 (partially) and 4 (mentioned above).

Though the innovative methods of teaching-learning, continuous assessment and evaluation seem interesting, the undertaking elements are not that easy. It is very challenging to identify a set of desirable course outcomes which are measurable and observable. The facilitator has a great responsibility to ensure that these course objectives are met successfully during the tenure of the course. Preparing an exciting and effective course plan with a range of activities is fundamental to the learners to attain the proposed results. Working with the learners, being open to a collaborative and collective learning method, facilitating and motivating the learner group consistently, are all vital in the effective implementation

Ms Assanu Augustine is Assistant Professor, Department of Mathematics, Facilitator of courses in Mathematics and Statistics.

of Outcome Based Education. Sharing and collaborating virtual environments to accomplish the specific outcomes in this pandemic scenario was one of the challenges. The assessment and evaluation process in OBE is also a time-consuming and Herculean task. The facilitator has to delineate rubrics for each activity, appropriate to measure the learning at the time of evaluation. They should cater to the different levels of learners and should map with the course outcomes as well. The next step after the evaluation is to propose remedial/advanced measures to upsurge and enhance the learning process of each student, especially the weaker ones. As an early bird in the implementation of OBE in our education system, it is very clear that this will create a radical change in the philosophy of education in the long run, and also enrich the creativity of the facilitators as well.

AN APPROACH TO INTRODUCE OBE IN MECHANICS



Dr Midhun H.
midhun.h@mariancollege.org
+91 9447777670

This article focuses on my experiences regarding the implementation of Outcome Based Education in Mechanics.

Mechanics is one of the most fundamental topics in Physics and usually the introductory topic for graduate courses. Mechanics deals with the motions of macroscopic objects and the laws governing those motions. The contents of the subject could be summarized as

- Fundamentals of Dynamics
- Work and Energy
- Collisions
- Rotational Dynamics
- Elasticity
- Fluid Mechanics
- Gravitation and central force Motion
- Oscillations

A student pursuing the course is expected to understand the laws of motion and their application to various dynamical situations, learn the concept of conservation of energy, momentum, angular momentum and apply them to basic physical problems.

Basically the student is supposed to understand the mechanisms of moving bodies in day-to-day life. In Outcome Based Education (OBE), the expected outcomes are specified early and these outcomes act as targets that teachers aim to help learners

to achieve. Keeping this in mind, the expected course outcomes were designed as follows:

- Examine the laws of motion and their application to various dynamical situations.
- Apply the concepts of particle dynamics, conservation laws and the theories of collisions
- Investigate the inverse square law of force and central force motion, and apply them to planetary dynamics.
- Analyze the phenomena of simple harmonic motion and the properties of systems executing such motions.
- Examine the principles of elasticity through the study of different modulus of elasticity and understand the principles of fluid flow and the equations governing fluid dynamics.

To attain these outcomes, active learning should be encouraged, which emphasizes the development of students' skills. The basic elements of active learning are speaking, listening, reading, writing and reflecting. These five elements involve cognitive activities that allow students to clarify, question, consolidate and understand new knowledge. The

second factor of active learning is the learning strategies that incorporate the above five elements. These are small groups, cooperative work, case studies, simulation, discussion, problem solving and journal writing. The third factor of active learning is the teaching resources that the teacher uses to encourage students to interact and participate actively in the activities. It is my belief that the shift from conventional education methods to the outcome based should start from the instructor's mode of teaching which is reflected in the learning process of the students. So, to achieve this transition, certain changes in the teaching-learning process were introduced. Some important aspects that were introduced initially are listed below.

- Students are motivated when they achieve the required outcomes.
- Students are encouraged to find out real life connections with the subject they are learning.
- Problem-centered approach is utilized.
- Teaching methods previously consisted mainly of lecturing on the topic in the classrooms using a chalkboard system. Without completely eliminating the

The main highlights of this article are the construction of outcomes of Mechanics, how to indulge in teaching the course in such a way as to enable students to efficiently achieve these outcomes, and the methodologies for evaluating whether the outcomes are achieved or not. This includes various practical and theoretical approaches and the creation of questions to assess the required outcomes.

chalkboard, more Information and Communications Technology (ICT) enabled tools are introduced in the classrooms, and students are also encouraged to study through these tools.

- Students are made active partners in the classrooms for the teaching-learning process.
- Student groups were formed and encouraged to study and solve problems as a group activity.

The most challenging part of the transition to OBE was the development of assessment methodologies for measuring the effective achievement of these course outcomes. One of the strategies developed was to provide students with real life situations or problems and ask them to analyze those by applying the theory studied. Virtual platforms were utilized to create such situations and they were encouraged to analyze given situations.

The simulations could be run by the student and thereby the problems solved at hand. Besides, the students could vary the initial conditions on their own and attain the predicted results. The predictions could only be made by the student who understood the concept clearly. This was

one method adopted for assessing the achievement of the outcome.

Physical experiments were also designed to analyze their knowledge in the subject and skills for practical applications. For example, projects were given to student groups to analyze the strength of different materials and how the morphology of sample material affected the experimental results. Students were expected to apply the concepts of elasticity to the problem and reach a conclusion.

This evaluation technique would check their understanding of the concepts and the practical skills to achieve the results. Student groups were encouraged to conduct similar experiments to assess the concepts of fluid dynamics, specifically the equation of continuity and Bernoulli's principle. A detailed project report containing the observations and conclusions of their experiments were drafted and submitted by each student group.

The final assessment of achievement of outcome was made by continuous assessment/semester end written and practical exam. One of the major challenges at this point was the preparation of questions to effectively assess the achievement of outcomes. Usual

questions testing the memory power of students were avoided wherever possible, and innovative questions checking the understanding of concepts were introduced. The questions were made to assess the level of understanding, the mathematical skills attained and the practical knowledge of the subject. The following is a sample question.

- Imagine you are paddling a canoe. When you approach the dock you quit paddling and let the resistance of the water bring you to a stop. Assume this force is proportional to the first power of the speed. Determine the motion.

To answer this, the student must understand the nature of the force, and use proper physical and mathematical concepts, deduce the time dependent solution of position and velocity of the canoe.

Other examples:

- Explain how an aeroplane gets an upward lift.
- Or
- A ping-pong ball may be held suspended in the air by blowing a jet of air just above it. Explain.

These questions also analyze the basic understanding of a student's knowledge on the subject without asking them to memorize anything. Even though the preparation of such questions to assess every outcome is tedious, the students will be highly benefited.

On the flip side, those students who could be categorized as slow learners were not picking up the new assessment methodologies quickly. It was difficult for them to adapt to the new system. But remedial classes and peer teaching methods were helpful in the transition.

OBE has certainly changed the students from passive to active learners. Instead of testing their memory power, the students were encouraged to think critically and analyze problems given to them logically by applying the concepts learned in the classroom. The instructors were also given an opportunity to deviate from the conventional path and to think out of the box, for novel and effective teaching methods. In OBE, the learning process was assessed at the semester

Dr Midhun H. is Assistant Professor in the Department of Physics. His subject areas include Mechanics, Thermodynamics and Optics. His research concentrates on increasing the efficiency of energy storage devices utilizing novel nanomaterials.

end by checking whether students were able to:

- accumulate the concepts of nature and analyze them to detect the fundamental principles of nature.
- utilize this knowledge to apply to physical problems and attain mathematical, practical, computational skills. They were also expected to apply this knowledge to analyze the results of experiments and observations.

OBE-A START OVER



Dr Boban Joseph
boban.joseph@mariancollege.org
+91 9483429290

This article looks at the positives, the author's personal experiences, some concerns, suggestions and future expectations of Outcome Based Education [OBE].

Outcome Based Education is an approach that has been proposed globally to ensure that learners adapt their learning in real work situations. In my opinion, it seems more effective and fruitful than the age-old traditional methods of teaching and learning. Considering the shortfalls, the actual learning needs are not met by the traditional ways of teaching considering the learning methods practised in the past decades in our country.

As a faculty member and facilitator of several courses, I am privileged to be part of OBE in the taught courses of the School of Social Work at Marian College, Kuttikkanam Autonomous, and I believe that ours would be the first Social Work department in an autonomous college in Kerala that is introduced to OBE.

OBE has helped in making decisions about the content of the curriculum, developing potential outcomes, developing creative teaching - learning practices, and applying various assessment procedures. In total, with OBE the educational environment can be transformed into a more student friendly, interactive and development oriented approach.

When OBE was first introduced in Marian College Kuttikkanam, I was associated with a colleague as a buddy on a course assigned to her in the programme of Bachelor of Social Work [BSW] titled '*Human Growth and Development*'. To begin, we perused the outcomes of the course in the syllabus and improved them as required after a couple of conjoint discussions. The initial challenge we faced was to prepare the rubrics befitting the evaluation of apply/analyse/evaluate/create type essay questions of the taught course. It was a hard-nosed task for us because we had not come across preparing such a measure before. After attending the periodical training given by Marian's examination cell on OBE, we overcame it with less effort by preparing the answer guideline inclusive of theory and application from each unit of the taught course.

Another important factor of OBE is that the buddy teacher involved in the taught course should have sufficient knowledge and experience in the course's theory as well as practicals. For instance, a teacher who is a greenhorn to a particular course and is neither involved in the theory nor is a part of the laboratory practicals may have a hard time during the different stages of the conduct of the

It is time for a change from traditional education to Outcome Based Education. The author articulates his individual experiences, few concerns and possible suggestions and advantages of OBE as a game changer.

course. If this concern is not properly discussed and addressed, it would not serve the purpose of maintaining the buddy in the question bank preparation, vetting, creating the answer guidelines and even in the semester end paper evaluation.

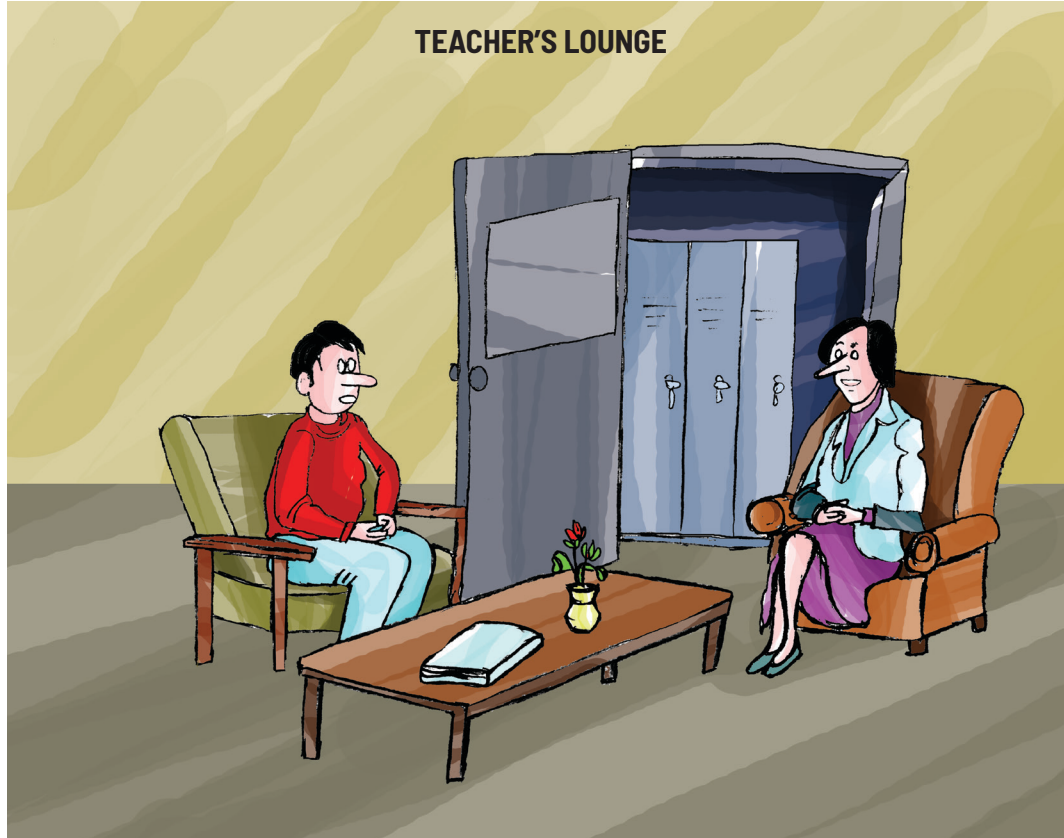
Inter-rater reliability in answer paper evaluation poses the next challenge in OBE. Different evaluators (i.e. the teacher assigned with the OBE course as lead and the buddy) may evaluate the same answer paper and give different marks without discussing with each other. To overcome this problem, it is advised that a few initially valued answer books be asked to be cross valued by the buddy and the course facilitator. Besides, they also have the freedom to discuss any doubts that may arise in an answer book. Conversely, to overcome the inter-rater reliability concern, my stance is to double value the entire answer books by the buddy and course facilitator which might be a tough job.

As far as I am concerned, the OBE classroom learning practice should be overhauled to equip students to learn with new learning approaches for their future employment. Value

for learning, provision of useful links of study materials, opportunity for self-assessment, relevance to future practice and benefits of peer education can be stressed at the time of teaching - learning practices. We initiated change for a cause and the future will be OBE in the light of the new education policy introduced in India. I am all agog for the success of the implementation of OBE at Marian College Kuttikkanam. I believe that the most sought after future workforce should be proud of their Alma mater-Marian College Kuttikkanam for its leadership and forethought in implementing OBE.

Dr Boban Joseph is Assistant Professor at School of Social Work.

“



"I was going to teach them the meaning of life...
but it wasn't on the test."

OUTCOME-ORIENTED TEACHING EXPERIMENTS OF RESEARCH METHODS



Br Joseph Charuplakkal
br.josephcharu@mariancollege.org
+91 9037467898, +91 9400036612

The article attempts to describe the change brought out in the teaching-learning process for attaining the outcomes. The strategy of learning by doing in a blended mode was adopted, and the results were satisfactory.

I have been teaching Social Work Research Methods, a course for the MSW students, for the last four years. The teaching-learning activities included lecturing with PowerPoint presentations, using whiteboard, seminar presentations by students on topics assigned to them, a mini research conducted by the students and discussions on it, etc. The assessments conducted included questions concerning mostly the conceptual understanding of research methods and a few application level questions. The question bank prepared was shared with the students who used to study based on the questions given. Almost all the students would pass the examinations. Social Work Research Methods is taught in the second semester of the four-semester programme of MSW. Even though the research project comes in the fourth semester, the students start doing the research project at the beginning of their third semester. What surprised me was that most of the students were not able to conduct a research project even though they had scored good grades in their examination in the Research Methods course in the second semester. They seemed to demonstrate poor understanding of research methods and conducting research. Even though the

course plan included a mini research, proper follow up and discussions on the mini research were not done adequately. This made me reflect on the ways of teaching the Research Methods course that would enhance learning and ensure the attainment of the outcomes of the course.

At this point, I had an invitation from a prestigious Social Work department in a college situated in central Kerala to help their MSW students in analysing the qualitative data collected as part of their research project in the fourth semester. What I used to do earlier was that I would prepare particularly good PowerPoint presentations and explain what qualitative data analysis was, the procedure of doing it and so on. This time I reflected more on the ways of helping the students attain the outcomes that they should be able to conduct qualitative data analysis after the training. Therefore, I decided to organise the training in a workshop model and the details of the workshop are discussed in the coming paragraphs.

The workshop was for two days. 26 MSW students attended the workshop. This time I decided not to give lectures on qualitative data analysis. Only nine of the students were doing

qualitative research, and therefore, they thought of collecting new data for the analysis so that all the students could actively engage in the analysis process. The entire data analysis workshop consisted of five sessions.

Session One

The students were grouped into four consisting of six or seven members in a group. I requested them to formulate a research problem for which they would collect data from among the members of the group itself in order to save time, and the data collection would be easier. It also made all the members of the group actively engaged in the group activity. All the groups formulated problems for the mini research and developed questions on which they collected data from the team members themselves. I had asked them to write down the data on one side of the paper only, with each point in a separate line. The students shared their experience of this process after collecting the data. Some groups subdivided their group into buddies and collected data from each other so that the entire group could complete the data collection in much less time.

Session Two

The data analysis demonstration was conducted in this session and the data collected by a group were taken. The group came forward to do analysis in front of the entire class. The analysis was conducted manually using chart papers, the written down data on single side of A4 size papers, glue, marker pens, scissors etc. They had collected data from six members. I asked them to organise the data on the broad themes of their study. They marked four major areas of their research on the top of two chart papers. Then I asked them to cut and paste the response of each respondent under the broad areas marked on the chart paper and they cut the pieces of information and pasted them on the chart paper under the respective major areas. While doing it they marked the names (pseudo names assigned to the respondents) of the respondents on the side of the piece of information they cut and pasted for further identification and analysis. Once all the responses of the respondents were pasted under the respective headings, we started to mark what the respondents said ('in a few words' – 'one word' or 'just a few words only') about the broad area, and it was written against each response (a kind of preliminary

A workshop model in which students engage in activities of actually carrying out research and related activities along a blended mode of discussions and comments has been found to be more effective in the student attainment of outcomes.

coding). When all the responses were so marked, we went ahead grouping all the similar points under a common code indicated by a word or a few words. Thus, we did the coding. Then, similar codes were grouped and new categories formed. All these were marked in the chart paper. The next step was grouping similar categories and arriving at themes. As the process reached the final stage, there was a movement from the specific to the general and from the concrete to the

abstract levels. These chart papers were clipped on a string tied along the classroom wall. This demo was done in one major area of the study of one group only. The students of the other groups started analysing data of their own study in the next session.

Session Three

The students started analysing data using chart papers and pasting the responses under major areas of enquiry. They followed the steps in the demo. While analysing data, the students in the groups raised several questions regarding qualitative data analysis. I went from one group to the other, enquiring the progress in their analysis and clarifying doubts. I realized that working in groups was a very good opportunity to pass information and learn. Students feel the need to do something, and they are in search of information. Whatever is communicated to them at this point would become learning. This is also another lesson I learnt - that we need to create a situation demanding information, and the students would search for it which would lead to learning. When all the groups had completed their analysis, they gathered in the common classroom and presented their analysis and the themes they had

arrived at. One group had conducted a cross-case analysis also. The next session was discussing the findings and writing the report of the mini research.

Session Four

The third session focussed on theorising the findings and reporting the findings. Formulating abstract general statements based on the themes was done in the groups and they started discussing the meaning of the themes with respect to the context in which the study was conducted, which related to the existing literature and the future implications of the findings. The major sections of report writing in APA style were explained to them and they started writing the research report. The final findings of the study were presented by all the groups, and the reports were presented by one group at the end of the session.

Session Five

The concluding session was meant to ensure learning by articulating the process of qualitative data analysis by the students themselves based on their experience of analysing the same in the workshop. I had not given a presentation or lecture on qualita-

tive data analysis to them. Each group came forward and discussed among themselves, formulating the steps in the process of qualitative data analysis (thematic analysis). They wrote it on the whiteboard. I was surprised to witness that all the groups had learnt the process of data analysis by doing it, and based on their experience they were defining it very well. I am sure that this is learning by doing. Students had developed the skills of qualitative thematic analysis, not by listening to lectures but by first-hand experience of doing it by themselves. It was observed that group dynamics and discussions in the group enhanced learning, especially of those students who were comparatively slow in learning. The use of chart papers, cutting and pasting of pieces of responses, grouping them on chart paper, drawing lines to indicate the similarities and relationships among them, leading to the drawing of themes out of the categories etc. were found to facilitate their learning and memory as they were using multiple senses and intelligence.

Further Experiments

This method of training qualitative data analysis was applied for a workshop conducted for MSW students in

a college in south Kerala also. There were slight differences from the previous workshop where students collected new data. Here, the students worked on the data which they had already collected for their studies and worked on it in groups. A similar pattern of the process and learning was observed here too.

The third experiment was with my own MSW second semester students who began their Social Work Research Methods course. I did not go for presentations and lecturing, but rather followed the strategy of learning by doing in a blended mode where the students are given assignments to do something, then come and present it before the class, discuss the way the assignment has been carried out with its strong and weak areas, and how its quality or methodological rigour could be improved. Students learn in real application situations which make them search for information. The want for information enhances learning and its assimilation.

The first assignment given was to download journal articles and identify the various elements based on a long list of elements already given. This helped them to understand the organisation of a research article and

how they are composed. No class on the elements was given, but in their need for identifying these elements, students went in search of understanding what these elements were. After doing this, we arranged a four-day workshop where we tried to learn by doing research and discussing it at its various stages of progress and making use of other opportunities for discussion, clarification of doubts and passing of information. Thus, we began the workshop by attending the Social Work PhD defence Viva voce and having a one-and-half hour long discussion on the various aspects of the PhD defence Viva. This was found to be an exceptionally good learning opportunity. We also created such learning moments by having a pre-presentation of student-papers before they presented it in a conference. Discussions and comments on these presentations helped students to understand the various aspects and concepts of research methods.

Students formed five groups consisting of six members each, and conducted a mini research. The input for problem formulation was given by a student. Books on research methodology had already been shared with them, and each student was assigned a chapter for enlightening the class.

The groups formulated their research problem and had a discussion on the research problems formulated by them, and they had to revise it and further refine it. Then, they developed a tool for data collection, collected data, had a demo of qualitative thematic analysis in the class and so on. Three groups conducted qualitative studies and two groups quantitative studies. Finally, they presented the findings and were able to make theoretical formulations of the findings. Now, they are working on preparing a research proposal for doing a more rigorous study. All the concepts of research are taught in the actual context of doing it by which students attain the course outcomes that emphasise their ability to design, carry out, and disseminate research independently and ethically.

Conclusion

A clear difference in the attainment of outcomes has been observed between the students who attended lectures and those who attended the workshop model of teaching learning practice. Those students who attended the workshop model of the teach-

ing learning process were found to be more equipped to carry out research, and exhibited more confidence in comparison with the students who attended lectures and presentations. It can be observed that when a lot of information on research methods was given through lectures at a time, the students were not exposed to actual situations of doing research, and learning was poor. The students did not have a need for information at that time. Now, when the students are asked to carry out a research, then they are in need of information and start searching for it. I have learned that we need to create a need for information among the students so that they start searching for it. When they search for it, they learn it. It is better, therefore, to have a blended mode of assignments of research activities, seminar presentations by the students for conceptual clarity, discussions and comments based on the activities done and peer evaluation of activities, etc. The outcome is that the students are able to carry out research. What more do we need ?

Br Joseph Charuplakkal, HOD and Asst. Professor, School of Social Work, Currently pursuing PhD in Social Work knowledge creation at CHRIST (Deemed to be University), Bengaluru

“



COLLECTION OF ARTICLES ON OBE

Dr Cherian P Kurian, Director of MITLE provides a list of articles on OBE.

Dr Cherian P Kurian
mitle.director@mariancollege.org
+91 9446 860733

- Ron Brandt, December 1992/January 1993 | Volume 50 | Number 4 Students at Risk Page 66-70 On **Outcome Based Education: A Conversation with Bill Spady**
- Zhe Cai* Wuhan College, Wuhan, Hubei, China - **An Empirical Study on the Flipped College English Classroom Teaching upon Outcome Based Education** -2018 3rd International Seminar on Social Science and Humanistic Education (SSHE 2018) ISBN: 978-1-60595-581-0
- Balasubramani R, Professor & Head, Dept of ISE, NMAM Institute of Technology, Nitte balasubramani.r@nitte.edu.in - **Attainment of Course Outcomes in Outcome Based Education: A Case Study**- Journal of Engineering Education Transformations , Volume 30 , No. 2, October 2016, ISSN 2349-2473, eISSN 2394-1707
- Margery H. Davis- **Outcome Based Education**- JVME 30(3) © 2003 AAVMC
- R. M. HARDEN*, J. R. CROSBY & M. H. DAVIS Centre for Medical Education, Tay Park House, Dundee, UK - **AMEE Guide No. 14: Outcome-based Education: Part 1DAn introduction to Outcome-based education- Medical Teacher**, Vol. 21, No. 1, 1999
- Rohaila Yusof, Norasmah Othman, Norlia Mat Norwani, Noor Lela Bt Ahmad, Norasibah Bt Abdul Jalil - **Implementation Of Outcome- Based Education (OBE) In Accounting Programme In Higher Education**-International Journal of Academic Research in Business and Social Sciences 2017, Vol. 7, No. 6 ISSN: 2222-6990
- SADIQ MIDRAJ -**Outcome-Based Education (OBE)** - The TESOL Encyclopedia of English Language Teaching. Edited by John I. Liontas (Project Editor: Margo DelliCarpini; Volume Editor: Ali Shehadeh). © 2018 John Wiley & Sons, Inc. Published 2018 by John Wiley & Sons, Inc. DOI: 10.1002/9781118784235.eelt0205
- **OUTCOMES -BASED EDUCATION: PRINCIPLES AND POSSIBILITIES**- Dr Roy Killen Faculty of Education, University of Newcastle, Australia - Killen, R. (2000). Outcomes-based education: Principles and possibilities. Unpublished manuscript, University of Newcastle, Faculty of Education.
- Avik Sanyal and Rajashree Gupta -**Some Limitations of Outcome-Based Education** - Springer Nature Singapore Pte Ltd. 2018 S. Bhattacharyya et al. (eds.), Industry Interactive Innovations in Science, Engineering and Technology, Lecture Notes in Networks and Systems 11, DOI 10.1007/978-981-10-3953-9_57
- Cynthia J. Brame, PhD, CFT Assistant Director - **Active Learning**
- Prof Polk (1996), revised 2003 **Learning Resources Unit**, British Columbia Institute of Technology Burnaby, British Columbia, Canada
- John Biggs, **What Student Does: Teaching for Enhanced Learning, Higher Education Research and Development**, Vol 18, No 1, 1999
- Biggs J, **Teaching for Quality Learning at University**, Buckingham, Open University Press (It's a Book)

ESSENTIAL READING ON OBE

Dr. Cherian P. Kurian
mitle.director@mariancollege.org
+91 9446 860733

- **Developing Outcomes-based Assessment for Learner-centered Education**, Amy Driscoll, Swarup Wood (2007).

Describes the move to outcomes-based assessment at California State University Monterey Bay.

Discusses the faculty's experience with the transition and features an anecdote at the start of each chapter.

- **Taxonomy of Educational Objectives: The Classification of Educational Goals**, Benjamin Samuel Bloom, Max D. Engelhart, Edward J. Furst (1956).

This volume classifies learning behaviors and provides concrete measures for identifying different levels of learning.

- **Getting Practical: About Outcomes-based Teaching : Learning Guide**, Costas Criticos, John Gultig, Jo Stielau (2002), South African Institute for Distance Education and Oxford University Press.

Getting Practical, the fifth module

in the Study of Education series, shows why teachers require an array of teaching strategies, both learner-centred and teacher-centred, if they are to be effective.

- **Handbook for Teachers in Universities and Colleges**, David Newble, Robert Cannon (2013).

First Published in 2000. Routledge is an imprint of Taylor & Francis

- **Modern Technologies for Teaching and Learning, Repro Books**, Darinskaia, Larisa Alexandrovna, Molodtsova, Gallina Ivanovna (2019).

Modern Technologies for Teaching and Learning in Socio-Humanitarian Disciplines aims to systematize technologies for teaching social and humanitarian disciplines and discuss educational technologies that the modern teacher can and should possess including tools for person-oriented learning and for setting and achieving learning goals.

- **Higher Education Assessments: Leadership Matters**, Gary L. Kramer and Randy L. Swing (Edited) (2010), Published in partner-

ship with the American Council on Education Rowman & Littlefield Publishers, Inc

- **OBE, Outcomes-based Education: A Teacher's Manual**, Helen Van der Horst, Ria McDonald (1997).
- **Teaching for Quality Learning at University Society for Research into Higher Education**, John Biggs, Catherine Tang (2011).

This book is an exceptional introduction to some difficult ideas. It is full of downright good advice for every academic who wants to do something practical to improve student learning.

Biggs and Tang present a unified view of university teaching that is both grounded in research and theory and replete with guidance for novice and expert instructors.

The book will inspire, challenge, unsettle, and in places annoy and even infuriate its readers, but it will succeed in helping them think about how high quality teaching can contribute to high quality learning.

- **Changing Curriculum: Studies on Outcomes-based Education**, Jonathan D. Jansen, Pam Christie (1999), Juta and Company Ltd.

This volume is a critical analysis of the OBE, its potential to succeed and its inherent implications for the education system.

- **Outcome-Based Strategies for Adult Learning**, Jones, Janice E., Baran, Mette L., Cosgrove, Preston B. (2018) Emerald Publishing Limited.

Featuring coverage on a broad range of topics such as experiential learning, instructional design, and formative assessment.

This book is ideally designed for educators, academicians, educational professionals, researchers, and upper-level students seeking current research on how instructional strategies can be tied to assessment.

- **Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses, Revised and Updated**, L. Dee Fink. (2013) John Wiley & Sons, Inc.

This book has been written in response to two widespread problems that much of college teaching today.

The first is that the majority of college teachers do not seem to have learning goals that go much beyond an understand-and-remember type of learning.

The second problem is that most teachers seem to have difficulty figuring out what teaching activities they might use in addition to the two traditional standbys: lecturing and leading discussions.

- **A Taxonomy for Learning, Teaching, and Assessing A Revision of Bloom 's Taxonomy of Educational Objectives**, Lorin W. Anderson, David R. Krathwohl, Peter W. Airasian, Kathleen A. Cruikshank, Richard E. Mayer, Paul R. Pintrich, James Rath, Merlin C. Wittrock Longman, (Editors), Abridged Edition 2001, New York
- **Learner-centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning**, Mary E. Huba, Jann E. Freed (2000).

Designed to bring you up to speed quickly, the book is grounded in the principles of constructivist learning theory and continuous improvement.

- **Outcomes-based Academic and Co-Curricular Program Review: A Compilation of Institutional Good Practices**, Marilee J. Bresciani (2006).

Examines the principles of assessment of student learning outcomes in the context of program review and discusses the good practices of institutions recognized for their improvements in research, teaching, and service.

- **Outcomes-Based Program Review: Closing Achievement Gaps In- and Outside the Classroom With Alignment to Predictive Analytics and Performance Metrics**, Marilee J. Bresciani Ludvik (2018).

This book introduces the reader to the principles of assessment of student learning outcomes in the context of program review, and illustrates how to implement a sustainable outcomes-based assessment program review process.

- **Outcome-Based Evaluation**, Robert L. Schalock (2013).

This book is the product of 30 years of experience with program evaluation.
- **Teaching Strategies for Outcomes-based Education**, Roy Killen (2007), Juta and Company Ltd.

This is an easily understandable and practical guide to effective teaching for teachers and trainers in all instructional settings: school, further education and training, and higher education.
- **Outcome-based Education: Concerns and Responses**, Spence Rogers, Bonnie Dana (1995), Phi Delta Kappa Educational Foundation.

Guide to outcome-based education and how it may be successfully used to develop school improvement and reform initiatives.
- **Curriculum Organization in Outcome-based Education**, Robert Bounds Burns (1987).
- **Assessing Student Outcomes**

Performance Assessment Using the Dimensions of Learning Model, Robert J. Marzano, Debra Pickering, Jay McTighe (1993).

A guide to help students improve their performance provides a variety of rubrics.

- **How to Create and Use Rubrics for Formative Assessment and Grading**, Susan M. Brookhart (2013).

Whether you are already familiar with rubrics or not, this book is a complete resource for writing rubrics that assist with learning as well as assess it.
- **Learning Communities 2.0 Educating in the Age of Empowerment**, William G. Spady and Charles J. Schwahn (2010), Published in partnership with the American Association of School Administrators, Rowman & Littlefield Education.
- **Outcome-based Education: Critical Issues and Answers**, William G. Spady, Francis Aldrine (2014), Australian University
- **Outcome-Based Education's**

Empowering Essence: Elevating Learning for an Awakening World, William Spady (2020)

William Spady's revolutionary book on Outcome-Based Education (OBE) provides extensive future-focused and transformational insights into the ongoing, very progressive advancements of OBE across the world.





Marian Campus

1. Administrative Block
2. Academic Block
3. Exam Centre and Studio Block
4. Boys Hostel
5. Ampitheatre
6. MBA Block
7. Ladies Hostel
8. Faculty Quarters
9. Guest House
10. Indoor Stadium
11. National Highway 183
12. State Highway
13. Auditorium
14. Kuttikkanam

AERIAL VIEW OF MARIAN COLLEGE KUTTIKANAM (AUTONOMOUS)

A WORD OF THANKS



'**OBE – The Implementation Experiences of a Higher Education Institution**' is the result of the efforts of several people. Gratitude is said to be the attitude of the heart. Sincere thanks to all of you.

- The **Patron, Governing Body** and all authorities of the college
- The **Principal** and the **IQAC Coordinator** who were instrumental in initiating the book
- **Prof N. V. Varghese**, Vice Chancellor NIEPA, New Delhi for gracing us with the foreword
- All the contributors of articles, including teachers and students
- The **Wincos Publications** Pala for being its publisher
- **Mr Jojin Jojo** of 3 B Com B for drawing the 22 cartoons
- Artist **Siju Punnekkad** of crea@ design art hub, the colourist of the cartoons
- The faculty and students who supported in the audio recording of the book and **Ms Claris Annie John** who coordinated the audio recording.
- Voice: **Dr Michel Puthethara, Dr Blesson Siby Abraham, Dr Midhun H., Dr Shintu Dennis, Mr Arun George Joseph, Mr Allen George Podippara, Ms Sona Mary Francis, Ms Assanu Augustine, Ms Keerti Eric, Ms Sherin B. Joseph, Ms Irene B. Joseph.**
- **Fr Sobi Kannalil, Mr Joby N.J.** and all at Marian Studio
- All the students of Marian College Kuttikkanam Autonomous who were the most important stakeholders in the implementation of OBE
- **Mr Jelit Mathews Joseph**, faculty member of the college for designing the book
- **Mr Kiran V. Nath and Mr Jelit Mathews Joseph** for cover Page designing
- **Ms Jeena Joseph** for technical help
- **Ms Pauline Joseph**, the language editor of the book
- **Ms Jyothylakshmi B.** for releasing of the Book
- **Ms Neethu Anil** who coordinated all the pre and post production works
- Marian College Kuttikkanam Autonomous, a place I love to work in, with its openness to innovation, its culture of positivity, support and encouragement - a place where work never ends

With a grateful heart,
Dr Chackochan J. Njavallil,
Coordinating Editor

The OBE model pays attention to what the courses and the programs provide to the student, but more importantly, it also focuses on making the student demonstrate what he/she is able to do on successful completion of the given learning experience.

Prof. Jose James PhD, DSc
Former Registrar,
Mahatma Gandhi University,
Kottayam, Kerala, India

The book is an enduring testimony of Marian College's commitment to the cause of education, its unflinching determination to battle all odds during the implementation of OBE, and the success that ensued. This book will certainly inspire many academicians to make significant efforts to implement OBE.

- **Professor N.V. Varghese**, Vice Chancellor, NIEPA, New Delhi

The transition from the traditional method of "teaching and testing" to implementing outcome-based learning curriculum framework was the most exciting journey in the academic career of the college.

- **Dr Roy Abraham P.**, Principal

OBE thus became the buzzword on the campus, and there were more questions than answers.

- **Dr Chackochan J. Njavallil**

If we happen to go through the course outcomes framed by institutions, it is evident that these outcomes are merely the objectives of the course.

- **Dr Binu Thomas**, Coordinator IQAC

