

RESOURCE PERSONS:

OUTCOME BASED EDUCATION (OBE)

Professor Arshad Noor Siddiquee, PhD
Professor at Jamia Millia Islamia (a Central University),
New Delhi

INSTRUCTIONAL METHODS & ICT TOOLS

CO-PO articulation & Assessment
(Hands on Session)

Dr. K. Rama Krishna,
Dean (Quality), KLEF

Dr. A. Srinadh
Dean (Skill Development), KLEF

Dr. Raghuveer V.R
Dean-Academics & ASC Principal, KLEF



ORGANIZING COMMITTEE

CHIEF PATRON:

Er. Koneru Satyanarayana,
President, KLEF

PATRONS:

Dr. K.S. Jagannatha Rao
Pro Chancellor

Dr. G.P. Saradhi Varma,
Vice Chancellor

Dr. N. Venkatram,
Pro-Vice chancellor (Admn)

Dr. A. Jagadeesh,
Registrar

CONVENERS:

Dr. K. Rama Krishna
Dean (Quality)

CO-CONVENER:

Dr. K. Subba rao
Director IQAC

Dr. Raghuveer V R
Principal (ASC)

CO-ORDINATORS:

Dr. Dama Kiran Kumar
Associate Dean (Quality)

Mr. T. Teja Sreenu,
Assistant Professor

ORGANIZING COMMITTEE:

Dr. M. Venu gopala Rao
Associate Dean (Quality)

Dr. K. V. Narasimha Rao
Associate Dean (Quality)

Dr. Radha Krishan Sharma
Associate Dean (Quality)

Dr. P. Lakshmi Prasanna
Associate Dean (Quality)

Dr. V. Shakeel Ahamad
Associate Dean (Quality)

Mr. K. Anil Kumar
Manager

Mr. T. Mallikharjuna Rao
Manager



CATEGORY 1
UNIVERSITY
BY MINISTRY OF HIGHER EDUCATION
GOVERNMENT OF INDIA
KL ACCREDITED BY
NAAC WITH A++
GRADE
RANKED 27
AMONG ALL
UNIVERSITIES
42 YEARS OF
EDUCATIONAL
LEADERSHIP

Jointly organized by

IQAC INTERNAL QUALITY
ASSURANCE CELL & **ASC** ACADEMIC
STAFF COLLEGE

One Day NATIONAL WORK SHOP ON IMPARTING QUALITY IN TEACHING & LEARNING THROUGH OUTCOME BASED EDUCATION

28th
SEPTEMBER
2022

www.kluniversity.in

ABOUT KLEF:

The KL College of Engineering was established in the Academic Year 1980-81 and attained autonomous status in 2006. Deemed University (Koneru Lakshmaiah Education Foundation Deemed to be University) status has conferred in the Year 2009 under Section 3 of UGC act 1956. NAAC assessed the University and accredited for a period of five years from 2018 to 2023 with CGPA of 3.57 with A++ grade. The University was accorded Category-1 status by UGC

WORKSHOP OBJECTIVES:

- ✓ To create awareness on the Course outcomes, Bloom's Taxonomy Levels, Program Outcomes
- ✓ To create awareness on Instructional design through course handout preparation
- ✓ To make the participants self-reliant in learning outcome assessment
- ✓ Quiz

PROGRAM SCHEDULE

10.00	Opening Remarks & Jyothiprajwalan
10.15	Workshop Objectives
10.25	Introduction of Resource person
10.30	Outcome based education (OBE)-1
11.30	High Tea
11.45	Outcome based education (OBE)-2
1.00	Lunch Break
2.00	Hands on Session
4.00	Quiz
4.30	Validictory

TARGET AUDIENCE:

- ✓ Principals / Directors / Administrators
- ✓ IQAC Coordinators / Directors / Members
- ✓ NAAC / NBA Coordinators
- ✓ Teaching faculty
- ✓ E-Certificate of Merit will be given to the participants upon successful completion of Quiz with $\geq 70\%$ marks.
- ✓ E- Certificate will be issued to all participants

REGISTER HERE:

<https://tinyurl.com/TnL-through-OBE>

SCAN HERE TO REGISTER



For More Details Please Contact:

Mr. T.Mallikharjuna Rao
Cell: 7997571467

Mr. K. Anil Kumar
Cell: 94944 18834

email: iqacworks@gmail.com



Koneru Lakshmaiah Education Foundation

(Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' Grade University ♦ Approved by AICTE ♦ ISO 9001-2015 Certified

Campus: Green Fields, Vaddeswaram - 522 502, Guntur District, Andhra Pradesh, INDIA.

Phone No. 0863 - 2399999; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 -2577715, Fax: +91-866-2577717.

INTERNAL QUALITY ASSURANCE CELL

Report on

One Day National Workshop on "Imparting Quality in Teaching & Learning through Outcome Based Education"

Date	:	28.09.2021
Mode	:	Physical & Online – WebEx (for KLUH Campus Faculty)
Time	:	10:00 am to 4:30 pm
Organized By	:	Internal Quality Assurance Cell (IQAC)/Academic Staff College (ASC), KLEF & Shree Velagapudi Ramakrishna Memorial College, Nagaram
Target Audience	:	- Principals / Directors / Administrators - IQAC Coordinators / Directors / Members - NAAC/NBA Coordinators - Teaching faculty

Workshop Brochure:

RESOURCE PERSONS:
OUTCOME BASED EDUCATION (OBE)
Professor Arshad Noor Siddiqui, PhD
 Professor at Jamia Millia Islamia (a Central University), New Delhi

INSTRUCTIONAL METHODS & ICT TOOLS
CO-PO articulation & Assessment
(Hands on Session)
Dr. K. Rama Krishna,
 Dean (Quality), KLEF
Dr. A. Srinadh
 Dean (Skill Development), KLEF
Dr. Raghuvver V.R
 Dean-Academics & ASC Principal, KLEF

ORGANIZING COMMITTEE
CHIEF PATRON:
 Er. Koneru Satyanarayana,
 President, KLEF

PATRONS:
Dr. K.S. Jagannatha Rao
 Pro Chancellor
Dr. G.P. Saradhi Varma,
 Vice Chancellor
Dr. N. Venkatram,
 Pro-Vice Chancellor (Admin)
Dr. A. Jagadeesh,
 Registrar

CONVENERS:
Dr. K. Rama Krishna
 Dean (Quality)
CO-CONVENER:
Dr. K. Subba Rao
 Director IQAC
Dr. Raghuvver V.R
 Principal (ASC)

CO-ORDINATORS:
Dr. Dama Kiran Kumar
 Associate Dean (Quality)
Mr. T. Teja Sreeni,
 Assistant Professor

ORGANIZING COMMITTEE:
Dr. M. Venu gopala Rao
 Associate Dean (Quality)
Dr. K. V. Narasimha Rao
 Associate Dean (Quality)
Dr. Radha Krishna Sharma
 Associate Dean (Quality)
Dr. P. Lakshmi Prasanna
 Associate Dean (Quality)
Dr. V. Shakeri Ahmmed
 Associate Dean (Quality)
Mr. K. Anil Kumar
 Manager
Mr. T. Mallikharjuna Rao
 Manager

Jointly organized by
KL-IQAC &
 Shree Velagapudi Ramakrishna
 Memorial College - Nagaram

**One Day
 NATIONAL WORK SHOP ON
 IMPARTING QUALITY IN
 TEACHING & LEARNING THROUGH
 OUTCOME BASED EDUCATION**

**28th
 SEPTEMBER
 2022**

www.kluniversity.in

ABOUT KLEF:
The KL College of Engineering was established in the Academic Year 1980-81 and attained autonomous status in 2006. Deemed University (Koneru Lakshmaiah Education Foundation Deemed to be University) status has conferred in the Year 2009 under Section 3 of UGC act 1956. NAAC assessed the University and accredited for a period of five years from 2018 to 2023 with CGPA of 3.57 with A++ grade. The University was accorded Category-1 status by UGC

WORKSHOP OBJECTIVES:

- ✓ To create awareness on the Course outcomes, Bloom's Taxonomy Levels, Program Outcomes
- ✓ To create awareness on Instructional design through course handout preparation
- ✓ To make the participants self-reliant in learning outcome assessment
- ✓ Quiz

PROGRAM SCHEDULE

10.00	Opening Remarks & Jyothiprajwalan
10.15	Workshop Objectives
10.25	Introduction of Resource person
10.30	Outcome based education (OBE)-1
11.30	High Tea
11.45	Outcome based education (OBE)-2
1.00	Lunch Break
2.00	Hands on Session
4.00	Quiz
4.30	Validictory

TARGET AUDIENCE:

- ✓ Principals / Directors / Administrators
- ✓ IQAC Coordinators / Directors / Members
- ✓ NAAC / NBA Coordinators
- ✓ Teaching faculty
- ✓ E-Certificate of Merit will be given to the participants upon successful completion of Quiz with $\geq 70\%$ marks.
- ✓ E- Certificate will be issued to all participants

REGISTER HERE:
<https://tinyurl.com/TnL-through-OBE>

SCAN HERE TO REGISTER

For More Details Please Contact:-
Mr. T. Mallikharajuna Rao
Cell: 7997571467
Mr. K. Anil Kumar
Cell: 94944 18834
email: iqacworks@gmail.com

The Internal Quality Assurance Cell (IQAC), Academic Staff College (ASC) & Shree Velagapudi Ramakrishna Memorial College, Nagaram jointly organized a National Workshop on **"Imparting Quality in Teaching & Learning through Outcome Based Education"** in blended mode (Physical workshop for Vijayawada faculty and through online mode using WebEx platform for KLU Hyderabad campus faculty) on 28th September 2022. The workshop was inaugurated by Dr. K. Ramakrishna, The Dean (Quality) at 10:00 am. The Chief Guest and invited Speaker, Dr. Arshad Noor Siddiquee, Professor of ECE, Jamia Millia Islamia (A Central University), New Delhi, the Dean (Quality), Dr K. Subba Rao, Director-IQAC and Dr. R. K. Ramakrishna Rao, Principal-COE and couple of Senior Associate Deans (IQAC) joined hands in traditional lighting of the lamp followed by invocation by B. Tech. students. The Dean-Quality emphasized the significance of Outcome Based Education in his welcome note and delivered the "Objectives of the Workshop" to the participants.

Dr. K. Ramakrishna, Dean (Quality) introduced the Chief Guest and invited Speaker, Dr. Arshad Noor Siddiquee, Professor of ECE, Jamia Millia Islamia (A Central University), New Delhi to the audience.

Dr. Arshad Noor Siddiquee graduated from Govt. Engineering College, Jabalpur during 1990 and obtained his Master's and Doctoral Degrees from IIT Delhi. Presently Dr. Siddiquee is working as Professor (Full) since January 2014, Department of Mechanical Engineering, Jamia Millia Islamia, New Delhi, India. He served in the capacity of Assistant Director, All India Council for Technical Education, New Delhi, India during September 2005 to March 2007. He also worked as Sr Lecturer during December 1998 to November 2001 at Department of Mechanical and Industrial Engineering, Caledonian College of

Engineering, Oman. He has guided six Research Scholars for PhD Degrees and presently many more are pursuing PhD under his guidance.

He has published over 200 papers in various Scientific Journals/Conferences, authored eight Books and six book chapters. Dr Siddiquee was Awarded Highly Cited Researcher of the Year 2016 by Thomson Reuters. He received "Innovation and Entrepreneurship Award" by IEOM Society International, Michigan, USA during August 2021. He is Author for CRC Press, Cambridge University Press and Associate Editor for PLOS ONE (an SCI Journal).

He is in the panel of Evaluators of National Board of Accreditation (NBA) for the accreditation of Technical Educational Institution in India and has been associated with NBA for more than six years and was instrumental in assessing more than 60 technical Institutions for accreditation. He is in the panel of Evaluators of National Accreditation & Assessment Council (NAAC) for the accreditation of Higher Educational Institution in India and has been associated with NAAC for several years and was instrumental in assessing several HEIs.

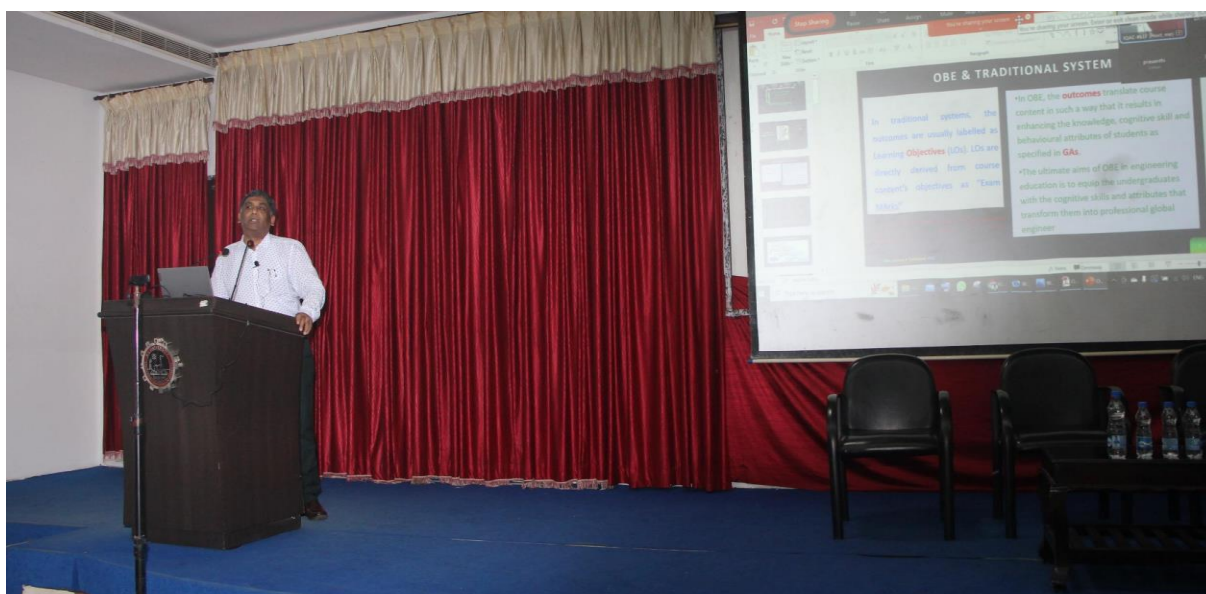
With this introduction, the Dean-Quality welcomed Dr Arshad Noor Siddiquee to start his address on OBE, relevant to various NBA Criteria. He particularly advised the Faculty from BT, CE & ECE Departments, to focus on the proceedings of the workshop and get maximum benefit out of it, in view of the upcoming NBA Per team visit.

Dr Arshad Noor Siddiquee in his opening remarks thanked the Dean-Quality for the generous introduction and mentioned that this is his second visit to KLEF. He offered to provide support in the following related to NMA Accreditation for Tier-1 Institution:

- SAR
- Evidences for presenting to the peer team
- How to face the Expert Committee

He said getting 3-year accreditation is not that difficult. However, getting 6-yr accreditation is quite difficult and advised the concerned faculty to focus on various issues. He said awareness of OBE helps in scoring marks under Criteria #1-3. KLEF should aim at scoring above 75% marks in 7 of the 10 criteria.

The takeaway points from his four sessions, which were spread over the entire day, are as follows:



Criterion #1: Vision, Mission and Program Educational Objectives (PEOs)

- ✓ Preparation and presentation of various 'evidences' is very important.
- ✓ Traditional system aims at achieving "Learning Objectives (LOs); OBE aims at obtaining cognitive skills leading to Graduate Outcomes.
- ✓ "Education is what remains after one has forgotten that one has learned in school" – Albert Einstein in 1920s/. This quotation amply describes OBE.
- ✓ OBE is based on a set of outcomes, which must:
 - Have a target value/benchmark (which shall be attained)
 - Attainment must be measured periodically
 - Benchmarks must be periodically adjusted to attain continuous improvement.
- ✓ OBE Ensures:
 - Global recognition of Graduates (leading to credit transfer and mobility)
 - Graduates possess GAs
 - GAs are developed through OBE
- ✓ Various Outcomes are: PEOs (12 No.), PSOs (4-5 No.), POs, COs, Cognitive skills and competencies
- ✓ Tier-1 Institutions should fix the targets higher.
- ✓ How to set targets? E. g. 60% students should GET >70% Marks.
- ✓ Education → Curriculum → Learning & Teaching → Assessment → Attributes
- ✓ OBE Framework: PEO Attainment: No marks
- ✓ Quality of Assessment Tools: Questionnaires to collect feedback from stakeholders should be prepared properly
- ✓ Alumni survey & Employer survey
- ✓ Methods of Survey:

- Printed form
- Telephone interviews
- Google forms
- Online survey
- ✓ Vision & Mission Statements: How to prepare?
- ✓ Continuous Assessment
- ✓ Typical OBE Implementation: Planning, Implementation, Assessment and Evaluation.
- ✓ PEOs should be **SMART** (Specific, Measurable, Achievable, Result-oriented and having a Time-frame)
- ✓ PEOs could be **ABCRL** (Accurate, Brief, Clarity, Relevant and Logical)
- ✓ No. of PEO Statements: Minimum: 3; Maximum: 5
- ✓ Graduate Outcomes (GAs): ASME/ABET address 15 Outcomes (12 PEO + 3 PSOs)
- ✓ More than one course should address every PO. All 15 Outcomes must be addressed by, say, 36 courses (including project) in SIX semesters (excluding First year)
- ✓ Defining COs: COs shall typically refer to skills
- ✓ Life-long learning shall be taken care of.
- ✓ There shall be a minimum of 45 lectures for a 3-credit course.
- ✓ Identification of slow learners and efforts to improve their performance shall be verified. (Criteria #4.3, 4.4 & 4.5)

Post-Lunch Session:

- ✓ CO-PO Mapping.
- ✓ How to create evidences?
- ✓ Facing the Assessors.
- ✓ VISION should be "Crisp"; preferably one sentence.
- ✓ MISSION (3-4 Sentences)
- ✓ The Vision/Mission of the "College of Engineering" shall be the same as that of the University.
- ✓ The University shall publish and disseminate Vision/Mission at prominent (multiple) locations. Even the POs and PEOs shall be demonstrated at appropriate places.

The Speaker demonstrated three different (model) Vision/Mission statements; one is of poor quality, one is mediocre and the third one is good.

- ✓ The institution shall appoint a senior person as Program Coordinator.
- ✓ Live MOUs are very important to support the qualifier "Global", as in KLEF Vision.

- ✓ Clear and robust documentation should be presented for the Vision, Mission of the University as well as the concerned Departments.
- ✓ BOS notifications shall be presented where necessary.
- ✓ Attendance sheets serve as evidences (valid proofs) for conduct of all meetings.
- ✓ The visiting Peers spend almost 1½ days in the department.

Criterion #2: Program Curriculum & TLP

- ✓ Break-up of Credits; 50% of the subjects shall be professional core subjects.
- ✓ This is also linked to Criterion #7.1. Very important for Tier-1 Institution such as KLEF.
- ✓ Curricular gap identification through feedback from Stakeholders.
- ✓ Well-organized course files.
- ✓ Content beyond syllabus (Technical talks, seminar/workshops – the objective of the workshop shall be the CO, which was not attained; Industry visits; Fabrication of models/prototypes (in-house)
- ✓ List of experiments
- ✓ Conduct of experiments – how many students are there in one batch? Record submission dates. Date of evaluation.
- ✓ Student counseling
- ✓ Quality of question papers; moderation of question papers, if required. (2.2.3.)
- ✓ Industry personnel delivering some portion of the syllabus (2.2.4)
- ✓ Internships (2.2.5)
- ✓ Additional support to weak students and encouraging bright students (by giving them additional tasks and additional rewards)
- ✓ Weak students shall be identified before In-sem Test 1 itself based on the available data.
- ✓ The weak students shall fare better in Test 2.
- ✓ Departmental calendar of events and their adherence; Documentary evidences, if there are any deviations. Non-adherence Report.
- ✓ Leave (Holiday) calendar.
- ✓ Good books are available on Relevance of TLP – 21st Century...
- ✓ Among all pedagogies, "chalk and talk" is the best.
- ✓ Evaluation methods
- ✓ Process of project allocation and evaluation – how to resolve if more students opt for the same guide?
- ✓ Projects shall be of - Industry, design, prototype building, sustainable.
- ✓ Monitoring and evaluation

Criterion #3: COs & POs

- ✓ All Academic processes shall be depicted by Flow-charts
- ✓ Attainment of COs for all course (3.2)
- ✓ Attainment of POs/PSO for all course (3.3)

Criterion #4: Students' Performance

- ✓ Minimum of 60% seats shall be filled.
- ✓ Verification of evidences shall be from "source". e. g. Results' data shall be verified from the data collected from the Controller of Examinations.
- ✓ Placements, higher studies and Entrepreneurship (Student progression)
- ✓ Appointment Letter/Letter of Offer/Identity Card/LinkedIn profile.
- ✓ Professional Society memberships and activities

Criterion #5: Faculty Information & Contributions

- ✓ Cadre-Ratio
- ✓ Appraisal format shall bring out OBE Parameters
- ✓ Adjunct faculty (5.10) – 10 Marks

Criterion #6: Facilities & Technical Support

- Additional facilities created for improving the quality of Learning experience in Laboratories

Criterion #7: Continuous Improvement

- OBE; IQAC/Audits.
- Improvement in the quality of admitted students.

During and towards the end of different sessions, Dr Siddiquee answered questions from several audiences, viz. Dr. K. Subba Rao, Director-IQAC, Dr. Radhakrishnan Sharma, Associate Dean-Quality, Dr. P. Satyanarayana, HOD-ECS, Dr Garikapati Diwakar, Professor of Mechanical Engg, Dr. Sujatha Moorthy, Professor of ECE, and few faculty from KLUBS and clarified doubts.

The participants actively attended the sessions, quiz and gave good feedbacks. They expressed their thanks to Team IQAC, ASC and KL University for the workshop. They also said that they expect more such workshops in future and the workshop was concluded. The list of participants, workshop snap-shots are enclosed herewith.

Dr K. Subba Rao, Director-IQAC and Dr. R. K. Ramakrishna Rao, Principal-COE joined Dr. K. Ramakrishna, Dean-Quality in felicitating the Chief guest and the Resource person for

the one-day workshop, Dr. Arshad Noor Siddiquee, Professor of ECE, Jamia Millia Islamia (A Central University), New Delhi for conducting this one-day workshop in a befitting manner.



The workshop was adjourned with Dr. K. Ramakrishna, Dean-Quality thanking the Chief Guest, participants and the Organizing Team for their cooperation.

Dr. K. Ramakrishna
(Dean-Quality)

To: All the Participants of the Workshop
Cc: IQAC File