

A Report on

One day workshop on

Outcome Based Education (OBE) and NIRF

Date: 26.07.2023

Venue: Auditorium, Puducherry Technological University



Organized by

Internal Quality Assurance Cell
PUDUCHERRY TECHNOLOGICAL UNIVERSITY
PUDUCHERRY-605 014

A one-day workshop on Outcome Based Education (OBE) and NIRF was conducted on Wednesday, 26.07.2023 in the Auditorium, Puducherry Technological University. Objective of the workshop is to familiarize the faculty members about the framework of Outcome Based Education and give a deep insight regarding formulation of Course Outcome (CO) statements, mapping course outcomes with NBA defined Program Outcomes (PO) and Program Specific Outcomes (PSO), Assessment procedures, direct and indirect attainment calculation of CO and PO. Around 140 faculty members (both Regular and On Contract) participated in the workshop.

Workshop was conducted in 5 different sessions with discussion on different aspects of OBE in 4 sessions and the 5th session focussing exclusively on NIRF. Title and topics covered in every session with the name of the speaker is given below.

Time	Title	Topics to be covered	Speaker
9.00 AM to 10.30 AM	OBE Frame work	Overview of OBE Process, Blooms Taxonomy and Teaching Learning Process	Prof. S.Mohan, Vice-Chancellor.
10.30 AM to 10.45 AM	Tea Break		
10.45 AM to 12.30 PM	OBE Outcomes	Course Outcome, Program Outcome, Program Specific Outcome and CO-PO Mapping	Prof.L.Nithyanandan, Associate Dean (NBA)
12.30 PM to 1.30 PM	Lunch Break		
1.30 PM to 3.00 PM	Assessment and Attainment	Assessment Procedure, Direct and Indirect CO Attainment and PO Attainment	Prof.S.Himavathi, Dean (Academic Courses)
3.00 PM to 3.15 PM	Tea Break		
3.15 PM to 4.00 PM	Continuous Quality Improvement and NBA Committees	Continuous Quality improvement, Identifying Gap, Bridging the gap/remedial measures and role of different committees in NBA.	Prof.T.Senthilvelan, Dean (IQAC)
4.00 PM to 5.00 PM	NIRF	Computation of relevant metrics & Plan of action to be taken.	Prof.K.Ramakrishnan, Convenor, NIRF.

Session -I - OBE Frame work

Prof.S.Mohan, Vice-Chancellor, PTU gave an overview of OBE. Speaker started his lecture giving a brief introduction regarding Washington Accord and the Role of NBA in India. He highlighted the importance of Accreditation from the perspective of all the stake-holders. He explained in detail the difference between Output based education and Outcome based education. He gave an overview of the following:

- ✓ Blooms Taxonomy and Revised Blooms Taxonomy
- ✓ Knowledge Domains-Cognitive, Psychomotor and Affective
- ✓ Teaching Learning Process
- ✓ Role of Teachers in OBE
- ✓ Do's and Don'ts while writing CO statements
- ✓ Graduate Attributes and POS
- ✓ How to map CO with PO/PSO?
- ✓ Program Educational Objectives (PEO)
- ✓ Mapping PEO with Department mission statements
- ✓ Vision/Mission of the department
- ✓ Vision/Mission of the University
- ✓ Types of Assessments
- ✓ Need for attainment calculations
- ✓ Different attainment calculations
- ✓ Attainment-Target and Achieved
- ✓ Identifying the Gap
- ✓ Bridging the gap through remedial measures.
- ✓ Continuous Quality Improvement
- ✓ Different criteria in NBA evaluation
- ✓ Documentation and its importance in Accreditation process.
- ✓ How to achieve the target of six years Accreditation?

Session -II – Outcomes in OBE

Prof.L.Nithyanandan, Associate Dean (NBA) discussed about the different outcomes in OBE. He explained all the outcomes in a bottom-top approach starting from CO, PO/PSO, PEO, Vision/Mission of the department and Vision/Mission of the University. In a detailed presentation, he explained the following.

- ✓ Course objective and Course Outcome
- ✓ Writing CO statements for Theory, Practical and professional development courses using the action words corresponding to various levels in different knowledge domains.
- ✓ How to ensure measurability/observability of CO in terms of key competencies?
- ✓ Sample syllabus and CO statements-Illustration
- ✓ POs and its relation with Cognitive, Psychomotor and Affective domain.
- ✓ Ways of identifying mapped CO and PO/PSO
- ✓ Evaluating mapping strength of CO-PO/PSO through performance indicators
- ✓ Sample CO-PO/PSO mapping-Illustration
- ✓ PEO and its alignment with Department mission.

Session -III – Assessment and Attainment

This session was handled by Prof.S.Himavathi, Dean (Academic Courses), Prof.K.Jayanthi, Associate Dean (Academic Courses) and Prof.G.Srinivasan, Associate Dean (NEP).Different types of Assessment was discussed. Following topics were dealt in detail:

- ✓ Assessment procedures for different type of courses
- ✓ Calculation of Direct attainment of CO with example
- ✓ Calculation of Indirect attainment of CO through course feedback
- ✓ Illustration of total CO attainment calculation using Excel sheet for different types of courses
- ✓ Calculation of Direct attainment of PO/PSO with example
- ✓ Calculation of Indirect attainment of PO/PSO through student, alumni, employer and teacher survey.
- ✓ Illustration of total PO attainment calculation using Excel sheet.

Session -IV – Continuous Quality Improvement and NBA Committees

Prof.T.Senthilvelan, Dean(IQAC), highlighted the importance of Continuous quality improvement and its impact on Teaching Learning Process. Following topics were discussed in detail.

- ✓ How to fix target for PO/PSO attainment?
- ✓ Identifying attained and non-attained PO/PSO.
- ✓ Planning the actions to be taken to bridge the gap for non- attained PO/PSO.
- ✓ Ways of executing the remedial measures.
- ✓ Recording of remedial action taken.
- ✓ Auditing CO/PO attainment and action taken.
- ✓ Methods to ensure Continuous Quality Improvement.
- ✓ Various NBA committees in the course/program/department and University level to ensure CQI.

Session - V – NIRF

The final session was on NIRF with emphasis on metrics influencing ranking and action to be taken to improve it. Prof.K.Ramakrishnan, Convenor, NIRF deliberated the following :

- ✓ Salient features of the NIRF ranking framework
- ✓ Need and the societal impact of Ranking
- ✓ Five basic parameters used in ranking;
 - Teaching and Learning Resources (TLR)
 - Research and Professional Practice (RPP)
 - Graduation Outcome (GO)
 - Outreach and Inclusivity (OI)
 - Peer Perception (PP)
- ✓ Sub metrics in each category and marks for each
- ✓ Case study comparing the marks scored by PTU with the institutes of similar stature
- ✓ Expected improvements and desired scores for PTU.

Discussion:

All the sessions were quite interesting and well received by the faculty. Numerous questions were raised by the participants and the following aspects were debated in the floor.

- ✓ Process of Accreditation
- ✓ Weightage to be given for Assignments in CO calculation.
- ✓ Feedback surveys
- ✓ Ways of collecting the feedback
- ✓ Ensuring CQI.
- ✓ NBA committees to be formulated and its role/responsibilities.
- ✓ Weak spots of PTU in NIRF ranking
- ✓ Ways to improve Rank.

Glimpses of workshop is included as **Annexure-I**. Feedback was collected from the participants through Google form. As of now, around 61 responses were received and given in the **Annexure-II**

Feedback questions:

1. Planning and Organization of workshop-Excellent/Very Good/Good/Bad/Very Bad
2. The goals of the workshop were clear-Yes/No
3. Topics were relevant and very much useful-Yes/No
4. Workshop covered all the aspects of OBE and NIRF-Yes/No
5. Workshop improved my understanding of OBE and NIRF-Very much/Yes/No
6. Rate the Quality of presentations-Excellent/Very Good/Good/Bad/Very Bad
7. Rate the Clarity of presentations-Excellent/Very Good/Good/Bad/Very Bad
8. The goals of the workshop were met-Yes/Partially/No
9. Overall rating of the workshop-Excellent/Very Good/Good/Bad/Very Bad
10. Over all, have you gained an overview of OBE?-Yes/No.

Annexure-I-Glimpses of OBE & NIRF Workshop





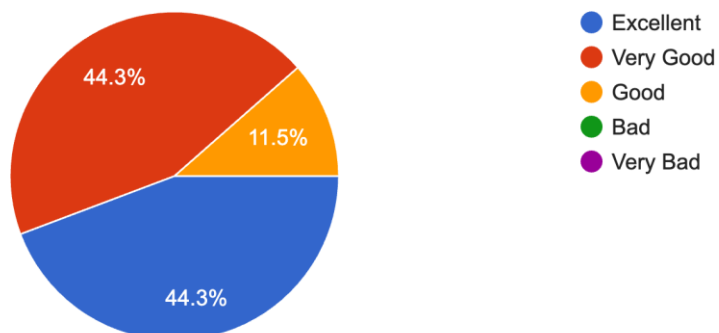




Annexure-II - Feedback Responses

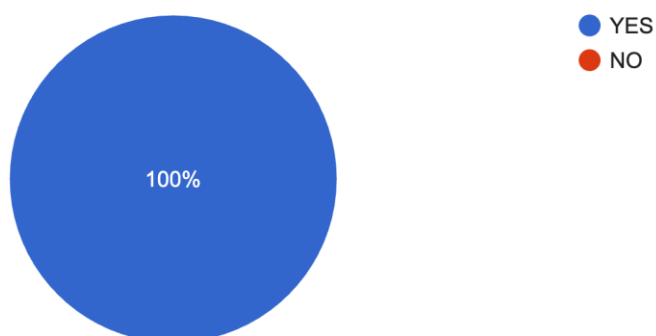
1. Planning and Organising of workshop.

61 responses



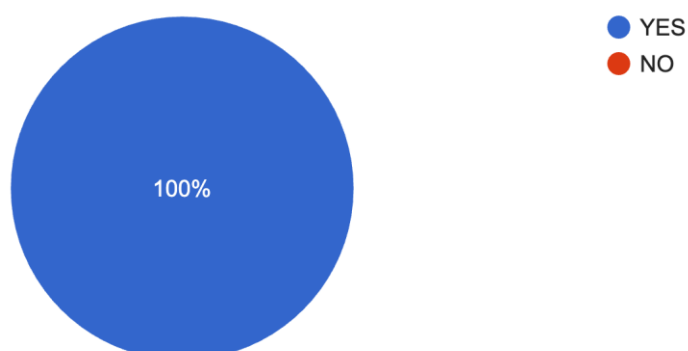
2. The goals of the workshop were clear.

61 responses



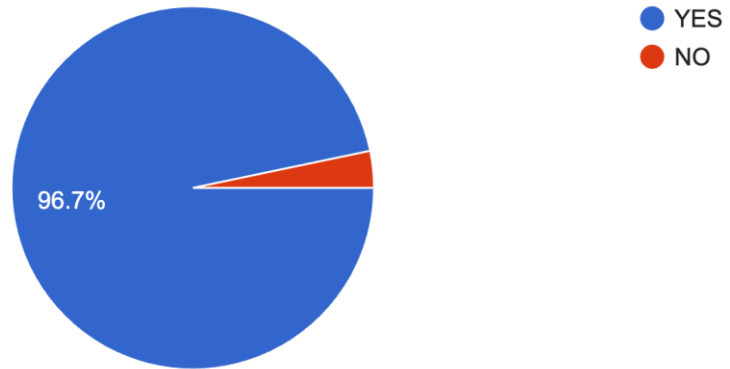
3. Topics were relevant and very much useful.

61 responses



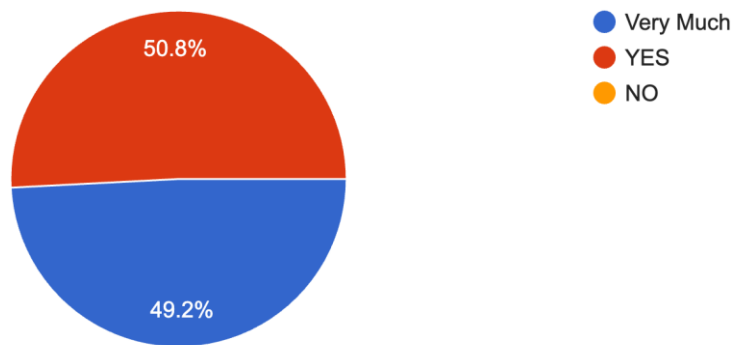
4. Workshop covered all the aspects of OBE and NIRF

61 responses



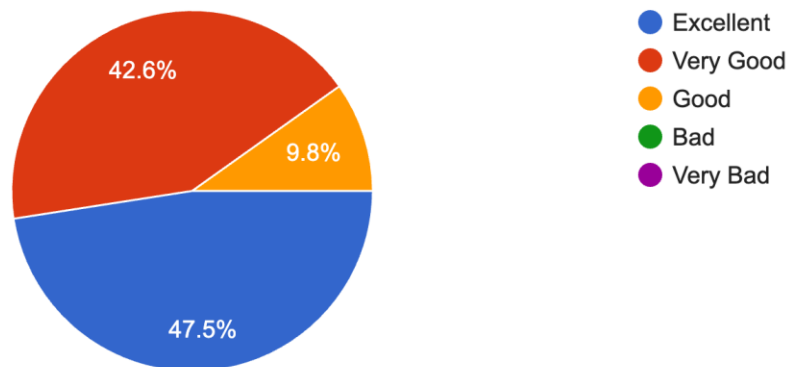
5. Workshop improved my understanding of OBE and NIRF.

61 responses



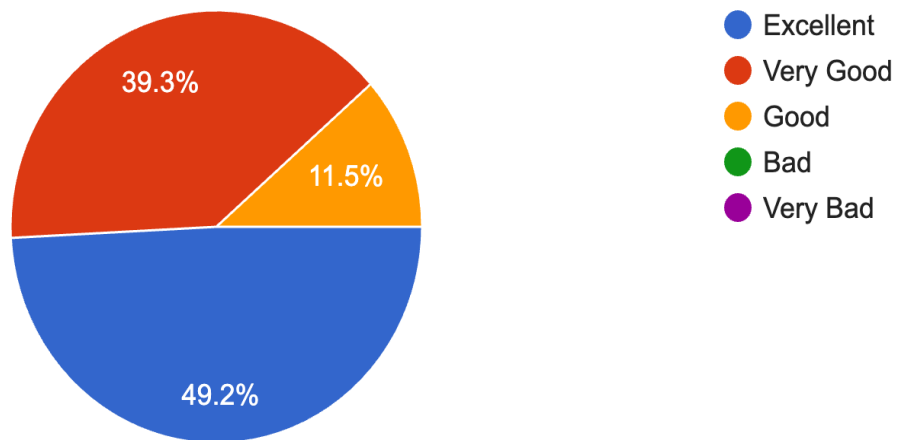
6. Rate the Quality of presentations.

61 responses



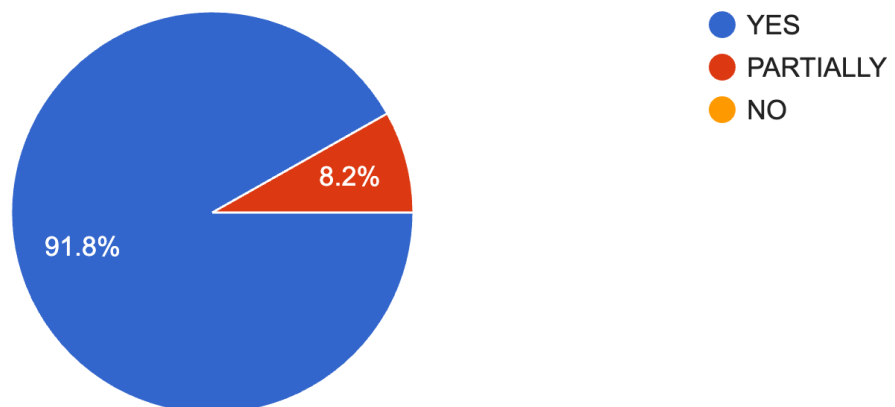
7. Rate the Clarity of presentations.

61 responses



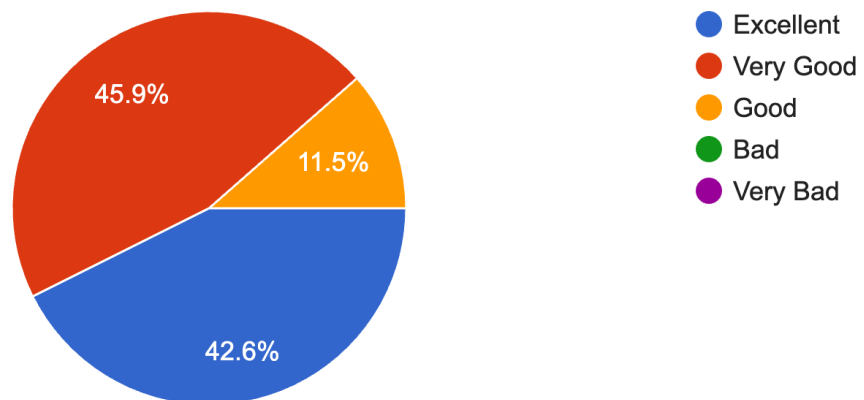
8. The goals of the workshop were met.

61 responses



9. Overall rating of the workshop.

61 responses



10. Over all, have you gained an overview of OBE?

61 responses

