

# **OUTCOME BASED EDUCATION (OBE) FOR THE COURSE OF ARCHITECTURE**

A policy paper for Dr. B N College of Architecture

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Outcome Based Education (OBE) is not just a word that has acquired currency in the recent times; rather it is a way of re-centering educational practice with students as the focus of education. The idea of student centered learning process may sound like stating the obvious, however as teachers all of us will acknowledge that often the concerns of ‘completing the curriculum’ outweigh the concerns of ensuring whether learning has happened. We get too focused on student performance rather than student progression. We spend time ‘covering’ the content rather than fostering habits of the mind. Refocusing on OBE will help us reset our priorities and maximize student learning.

We have formulated four distinct stages in Planning for OBE.

## **Stage 1 - Faculty Capacity Building**

Holding faculty workshops both for the entire cohort as well as subject specific groups to explain and discuss the meaning, principles and tools necessary for implementing OBE.

## **Stage 2 – Building an Outcome framework**

Building an Outcomes framework is a process that involves the following

1. Defining Learning outcomes.  
Over years we have realized that the curriculum mandated by the affiliating university is inadequate for the purpose of defining learning outcomes. Using curriculum as a baseline, subject faculty will have to write their syllabus documents defining the learning outcomes. Blooms Taxonomy of Cognitive and Psycho-Motor Learning may be effectively used for this purpose.
2. Deciding on a teaching /learning strategy.  
Rather than relying on lecturing as a dominant teaching strategy, the teachers will be encouraged to use collaborative learning, learning through Inquiry, learning through Simulation, learning using mental models, Behavioral Learning and Experiential Learning along with lecturing in order to cater to various learning styles and ensure fulfillment of learning objectives.
3. formulating an assignment based on the level of learning expected  
The assignment will have to be designed keeping in mind the learning objectives. The assignments will also have to be formulated to ensure that student knowledge is scaffolded on their previous understanding. It is encouraged to stack the assignment so that the challenge faced by each student in solving the assignment is within their proximal zone of development.
4. Designing a robust assessment tool  
Assessment formulation has to be accompanied by an assessment rubric with very clearly stated criteria. More clear and visible the rubric is, better will be the self-judgment capacity of the students. The act of writing the rubric will also be a good exercise for the teachers and help them refocus on the learning outcomes

### **Stage 3 – Implementation**

The prepared framework will be implemented in classrooms. It is planned to focus on skill based and theory based subjects in the initial phase before implementing the OBE for design subjects.

### **Stage 4 – Review**

Conducting faculty review meetings and student feedback will feed back into tweaking and fine tuning the outcomes framework. Once the first round of outcomes has been defined we plan to map it on the program outcomes and program specific outcomes. The PO's and PSO's will be based on the University Curriculum, the Model curriculum for Architecture as defined by AICTE as well as the NAAB criteria developed in USA. The next part summarizes the PSO criteria that we plan to use as a framework at BNCA

#### **Program Specific Outcomes for the course of Architecture**

The program specific outcomes at BNCA are developed from our attempt at defining graduate attributes of final year students. The program specific outcomes that we have defined are mapped below on to the program outcomes as defined in the curriculum for Architecture defined by our affiliating university, Savitribai Phule Pune University. The mapping of Program outcomes and program specific outcomes is as stated below

#### ***Program Outcomes as per Savitribai Phule Pune University (SPPU) Curriculum, 2019***

- PO1 Knowledge -Understanding about role of various knowledge domains such as humanities, technology, and environment in design of built environment.
- PO2 Principles & Theory- Knowledge of principles of architecture & theoretical knowledge and its application in design.
- PO3 Creativity - Creative and design thinking ability.
- PO4 Practice - Ability to understand real life situation of Architectural Practice and to work with ethical and professional responsibilities.
- PO5 Collaborative Working -Ability to communicate effectively and work in interdisciplinary groups.
- PO6 Inclusivity -Sensitivity in design for inclusivity, equity, environment, diverse cultures, and heritage.
- PO7 Technological Knowhow-Ability to review, comprehend and report technological developments in the profession of architecture and construction.
- PO8 Ability to choose Area of Specialisation or Practise- Able to judge one's area of interest and accordingly choose the field of practice.

Program Specific Outcomes as defined at BNCA

- PSO1 Ability to communicate design using various representation tools
- PSO2 Design Architectural form working from a conceptual argument that is well articulated and presented and uses the principles of form making.
- PSO3 Ability to prepare a design brief that is presented as a detailed analysis of all the functions and associated activities.
- PSO4 Ability to employ appropriate Structural system with an understanding of its components and with due architectural considerations
- PSO5 Ability to resolve various associated services in response to the challenges posed by building typology / scale / site.
- PSO6 Ability to design a building using a variety of passive climate control strategies including orientation, site planning, and building envelope design
- PO7 Ability to design outdoor space with a program and achieving a good integration of the inside and the outside
- PSO8 Ability to theoretically position a project as an argument for an issue of urban, cultural or architectural relevance
- PSO9 Ability to extensively analyse context of a project and explore a set of possible ways of responding to the social and cultural context
- PO10 Preparing design documentation that is adequate for various requirements such as estimation, construction and regulatory approvals.
- PSO11 Ability to undertake research activity in any area related to the built environment
- PSO12 Ability to execute a project in a competent manner including client communication and collaboration with the various consultants

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
PO1												
PO2												
PO3												
PO4												
PO5												
PO6												
PO7												
PO8												

Mapping the Program Educational Objectives defined by SPPU curriculum and PSO's defined by BNCA.

- PEO1 Theoretical Base – To establish strong theoretical base and understanding of Architecture and work of an architect.
- PEO2 Knowledge and Skills – To inculcate design sensitivity and ability, as well as knowledge in the domains of humanities, technology & art and impart skills so as to equip the graduate student to undertake work of an architect.
- PEO3 Values - Sensitize the students to the universal values of equity, environmental care, accessibility, and respect for heritage and equip them to address these through design.
- PEO4 Research - Train the students to methodically research a issue or a situation to find a creative solution to meet the contextual challenges in the realm of changing technologies, socio economic and cultural changes.
- PEO5 Practice and Ethics - To enable the students to practice as architects and imbibe them with the knowledge of the professional practice and ethics.
- PEO6 Changes and Diversification - To expose the students to the changes in architectural practice, diversifications and evolving role of an architect.

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
PEO1												
PEO2												
PEO3												
PEO4												
PEO5												
PEO6												

BNCA has undertaken the exercise of mapping these program specific outcomes onto the course outcomes that we are gradually developing. We foresee a minimum of a year's time to have a working framework of Outcome based education system to be used in our teaching / learning of Architecture