

Teaching and Learning Processes at the Institute

Table of Contents

| | |
|---|----|
| Pedagogy with inclusiveness:..... | 2 |
| Experiential Learning:..... | 3 |
| Place Based Learning: | 4 |
| Combination of Formal and Informal methods of learning | 6 |
| The contextual learning | 7 |
| Effective use of library | 8 |
| Mentorship Program:..... | 8 |
| Peer learning: | 8 |
| Learning through decoding by model making: | 8 |
| Learning history by theatre and drama | 11 |
| Learning through Interaction with the experts visiting to campus..... | 12 |
| Learning through collaborative studio..... | 18 |



1. Pedagogy with inclusiveness:

The institute believes in teaching that is inclusive in nature and addresses various diversities of the students. Faculty believes that every student has some special ability, which makes him/ her distinctive individual. Architectural education and the curriculum have balance of creativity, technological knowledge, thinking and their applications. This education grooms students for all these facets. Instead of calling them slow or advanced learners, Brick faculty categorizes the students in three types, i.e., 'Visual', 'Kinesthetic' and 'Auditory learners'. The visual learners are the once who learn more by seeing, have intense concentration, and are organized while problem solving. The Kinesthetic learners learn more with hands on exercises, they are not avid readers and also not attentive to visual or auditory presentation so may seem distracted. Whereas, Auditory learners Learn through verbal instructions from self or others. Following are the stages where the different methods are adopted to assess the learning levels and organize teaching accordingly.

Admission Stage:

Class mentors take a survey at after admissions and categorize them in these three categories. To understand them even better, there is 3-4 days long orientation program which is designed by experts and the first-year class mentors remain with these experts for full time. This program introduces students to architecture with some explorations that need creativity, reading, travelling, writing, drawing, model making, and presentation skills. These days give opportunity to the faculty to identify the cognitive abilities in the students.

Teaching plan stage:

There is a right balance of all the types of students in both the sections and pedagogy is formed in a way that it addresses learning of all these types. We call the academic works 'Explorations' where there is collective learning and students learn in groups. The teaching plan is thoughtfully designed in a way that the explorations address the learning needs of all these types of learners. In most of the courses, there are some group explorations where they have opportunity to apply various talents in the individuals. Also, there are parameters where individual performance needs to be accounted for. Faculty gives individual attention to each of the students, and helps them to compete with the challenges in academics. The teacher to students' ratio in major studio subjects is 1:15, and is very manageable ratio to understand the students.

Teaching stage:

There is continuous internal evaluation, and at every 4 weeks, students are informed about their attendance and work performance. Even for fast learners if the attendance is not good the performance may slow down and hence equal attention is given to make them '*punctual and attentive*'. There is continuous dialogue between the students and faculty to bring their performance work. Special attention is given to the bright students for making their performance outstanding, and also to the poor performers to empower them with extra work.

2. Pedagogy with maximized exposure

There are opportunities to perform at number of platforms other than the regular academic activities. They are assigned these activities based on their area of interest and capability. There are architectural competitions, quizzes, National Convention of Students of Architecture (NASA), Research and Travel Grant, Exposure Tours, Cultural activities, sports, Societal

contribution projects, Publications, etc, where depending on their capabilities, they are distributed in the respective activities and feel confident.

Experiential Learning: Every course is contextualized. Always, there is participative learning, where the concepts and basic content of knowledge is given by the teachers and the application and present-day practices are explored by the students in the form of site visits, industrial visits and also by book-based readings. They learn a lot by experience sharing (discussions/ presentations) and interactive sessions.



Example of experiential learning and problem solving- learning acoustics with field measurements, analysis and installation and analysis of the designed case



Place Based Learning: There are site visits, industrial visits etc. for technological subjects. However, for Design and Thinking Lab- the geographical, economic, environmental, cultural, community level aspects are derived from a specific location. Design is generally a combination of '**Problem Solving**' and '**Project Based**' Learning. They are given a project on real site, where they visit and understand that how they can solve the issues by identifying the scope of architectural profession.



Students visited Flame University Campus to experience the campus design



A group picture at the Flame University Campus





Visit to COEP to understand the building services



Combination of Formal and Informal methods of learning-

Institute believe in balance of formal and informal methods. The core strength of teaching is in design of rich content of knowledge, and much focus is on developing concept base. In 21st century the students have to develop their competencies, going beyond dimensions and think at global level of application. Having strong concept base and developing thinking ability broadens the scope of the students to do further research in any area. There are interactive sessions in every class. The sessions help them understanding the need of the course and build their confidence in problem solving of the present context.



Learning through Interactions



The contextual learning:

Contextualization is about conveying the importance of the subject in the present context and building up confidence in the students about their capability to work for the situation with their professional expertise. The very first classes of the beginning are spent on contextualization and sensitization. For example, in town planning the issues of City that are faced by students on day-to-day basis were discussed. The questions are triggered that while coming to college, which all City related problems they face? This thought process opens up them for the matters of traffic and transportation, conservation, environmental issues, housing, slums and also the open Spaces in the city. They themselves realize the urban issues and felt about responsibility of their profession to deal with these matters. For some of the students of Heritage structures were point of worry. They expressed that if history is properly studied the spaces can be revitalized and can become active spaces in existing cities fabric. Degrading state of Open Spaces in the city was concerning to few of the students and then with some discussion they could go to the root problem of this condition. And also realize that how master plan or development plan is responsible for shaping the cities.

The initial discussion on the urban issues evokes curiosity in the students to know about the urban level matters and coming out of the scope of architecture. They interact well at their level. Many of the students take such exercises as an opportunity to exposure.



Effective use of library: It happens even in most of the subjects, where some of the explorations are book based and teachers either suggest books or at times accompany them in the library to guide that which books to be referred and how to be referred.

Mentorship Program: There is mentorship program, where Mentors identify the problems of struggling students, and help them to deal with them. Even the present day urbanization and long distance traveling to the institute becomes challenging in commuting till the institute. In such cases they have informal sessions in the campus or also outside, where they make bond with the mentors and strive for improvement.

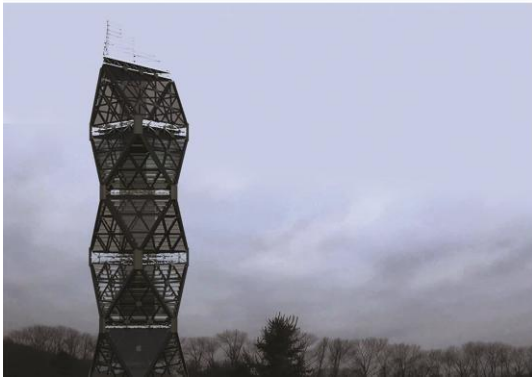
Peer learning: Some of the studies are based on site visits, market surveys and case studies. For this the students are sent to various places to collect the information in the format suggested by the faculty. These formats are drawings, models, presentations and printed formats. There are reviews of these works in the class and it becomes source of information



Exploratory learning: Students exploring something on site with Faculty and learning through it

Learning through decoding by model making: A culture has been set by faculty to guide the students in making models for decoding of some important structures or construction technology. Work of previous batch becomes a reference material for the next batches. Very detailed models of stadiums, metro stations, high rise towers, Reinforcement details in RCC, steel structures, long span structures, etc., have been prepared by the students. These models are kept in permanent exhibition space in the campus. This space is a major tool for communicating the information.

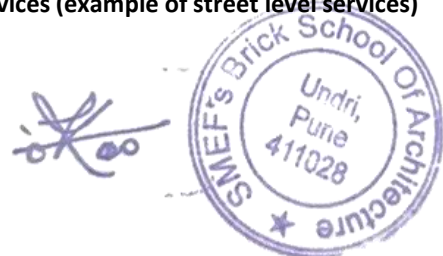




Learning by decoding through model making exercises in advanced building system (example of structural system of high rise buildings)



Learning by decoding through model making exercises in services (example of street level services)





**Learning by decoding through model making
Exercises in History of architecture (example of ancient temples)**



**Learning by decoding through model making
Exercises in History of architecture (example of ancient rock cut architecture)**



Learning history by theatre and drama





Learning by dance

Learning through Interaction with the experts visiting to campus- The content of syllabus is delivered by the subject faculty, however to enrich the teaching with practical and real time examples, there are interaction by professional people.

- a. **Expert lectures-** For example experts were invited in campus to demonstrate use of “Total Station” in Surveying and Levelling. A firefighting design consultant was invited to share the live projects and current practices in firefighting design for Building service. Institute gives permission to invite an expert lecture for the theory subjects and external jury for studio subjects.
- b. **Exposure sessions-** there are experiences sharing sessions in the campus. The names of these sessions are “World Outside”, “Young mind connect”, “Chai with an Author”. „World outside” is an experience sharing session of the students, who go for internship and then share their experience with other students. „Young minds connect” is a program where a master architect is invited in the campus and he/she shares the design philosophy and some projects of their office. “Chai with an Author” is a session initiated by librarian where an author is invited in the campus and there is experience sharing session of the journey of writing book/s. These authors are generally selected based on the books written by them and their relation with architecture.

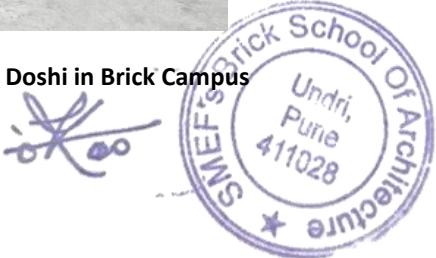




Students and teachers interacting with Master architect, Balkrishna Doshi



Learning through experience sharing: Padmabhushan Ar. B.V. Doshi in Brick Campus





Learning through experience sharing

Ar. Narendra Denge at Campus: it was an event to give Tribute to Master Architect Charles Chorea





Ar. Hafees Contractor in Brick: Learning through experience sharing



Ar. Rob Fleming at Brick: Learning through experience sharing





Eminent Ar. Shirish Beri in Brick campus: Learning through experience sharing





Eminent Ar. Prakash Deshmukh in Brick campus: Learning through experience sharing

Learning through collaborative studio

The institute did a collaboration with RVS university, Padmavati School of Architecture, and Folds Studio Mumbai. It was the first technology workshop of its kind, where 90+40 young and creative minds researched and explored technology and materials together for 6 days. It was an equal partnership between two academic faculty members pursuing mutually exciting and beneficial research through a shared teaching pedagogy. discussion about long span structures, how it should be designed, and what all things to be noticed in detail. Have explained the possibilities of structural systems as per location, load, material and functionality in detail including explanation of related terminologies and constructional details.



"Lonavala is a hill station surrounded by green valleys in western India near Mumbai. High-altitude trails & lookouts in a rugged area known for spindly, foliage-covered rock formations. At a distance of 12 km from Lonavala railway station and 12 km from Tung fort, **tiger's leap or tiger's point** is a scenic viewpoint situated at kurvande on the route towards aamby valley from Lonavala.

Tiger's leap, also known as waghdari, is a cliff-top with a sheer drop of over 650 m, offering a wide view of the hills. The point derives its name from its resemblance to the shape of a leaping tiger. It offers spectacular views of forests, lush greenery, waterfalls and lakes around. The sunrise and sunset views from here are mesmerizing.

Design and detail a pedestrian **skybridge/skywalk** allowing visitors to take a scenic stroll high above the lush to witness the beauty of Sahyadris from atop.

It should protect pedestrians from the weather, could add observation platform, rest points, could merge the shops or cafes, other functions could be added as per your design. The minimum length should be 70 m with a minimum width of 3.5 m. Could choose any applicable material. Design should be parametric, sustainable, flexible and economical. Statics of wind velocity, wind turbulence, ecologically sensitive zone, heavy rainfall need to be consider.

Material specification, structural system and construction details need to be worked out. The drawings should be as detailed as ready for construction.

DESIGN BRIEF

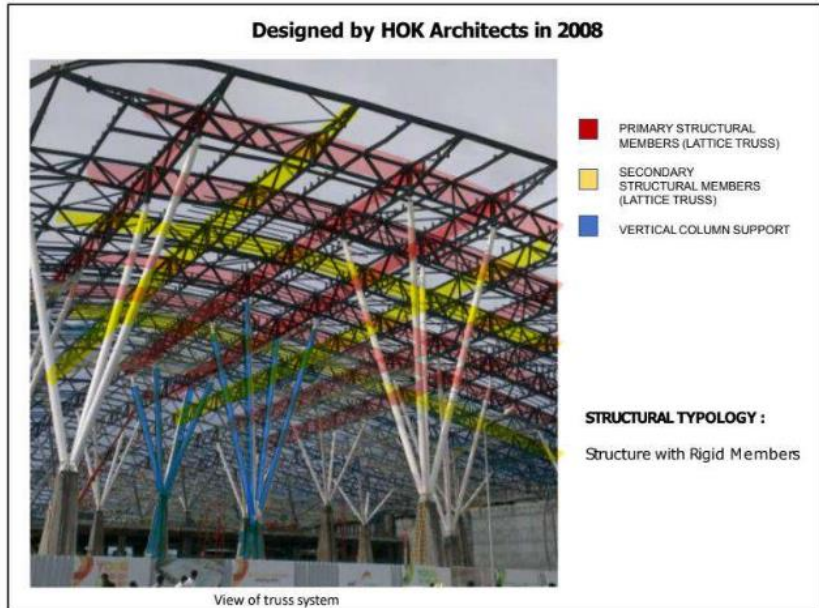
SKYWALK



Site - Tiger Point, Lonavala, Maharashtra



Exercise 1 – students were asked to identify the structural typology and composition of primary and secondary member of any long span structure. This exercise was taken to check their basic understanding of the members.



"**Lonavala** is a hill station surrounded by green valleys in western India near Mumbai. High-altitude trails & lookouts in a rugged area known for spindly, foliage-covered rock formations. At a distance of 12 km from Lonavala railway station and 12 km from Tung fort, **tiger's leap or tiger's point** is a scenic viewpoint situated at kurvande on the route towards aamby valley from Lonavala.

Tiger's leap, also known as waghdari, is a cliff-top with a sheer drop of over 650 m, offering a wide view of the hills. The point derives its name from its resemblance to the shape of a leaping tiger. It offers spectacular views of forests, lush greenery, waterfalls and lakes around. The sunrise and sunset views from here are mesmerizing.

Design and detail a pedestrian **skybridge/skywalk** allowing visitors to take a scenic stroll high above the lush to witness the beauty of Sahyadris from atop.

It should protect pedestrians from the weather, could add observation platform, rest points, could merge the shops or cafes, other functions could be added as per your design. The minimum length should be 70 m with a minimum width of 3.5 m. Could choose any applicable material. Design should be parametric, sustainable, flexible and economical. Statics of wind velocity, wind turbulence, ecologically sensitive zone, heavy rainfall need to be consider.

Material specification, structural system and construction details need to be worked out. The drawings should be as detailed as ready for construction.

DESIGN BRIEF

SKYWALK



Exercise 2 – students were given identified skywalk/skybridges, they had to do the detail analysis through models and hand done sheets. It helped them to understand the architectural and structural approach of team for the respective case as per the site context and visualize the scale of members.



Site Visit at FOLDS studio Mumbai – it was planned to understand the concept of parametric approach along with its practicality and financial aspect.



Guest Lecture- Peer Review on Structural Analysis for Skywalk Design. Mr. Ashok W. Kulkarni was invited on campus, who is presently associated with CQRA Pvt. Ltd, Pune. He has a vast experience in the Structural Design of famous and complex long-span structures and high-rise buildings, he was the vice president of Reliance retail Ltd. and was part of the structural design team of Statue of Unity, Gujarat. This event was an insight by an experienced structural consultant to impart the importance of structural analysis on the architectural design of long-span structures.

