

# Use of Technology in Modern Architectural Education post-pandemic 2020 globally and key for growth in Architectural Education in India: Case of SAPD, ITM University, Nava Raipur.

Mustufa Jameel Ahmed, Professor, School of Architecture Planning and Design, ITM University, Upparwara Village, Nava Raipur, India. [mustufa@itmuniversity.org](mailto:mustufa@itmuniversity.org)

**ABSTRACT** - The 2020 Pandemic has changed the total outlook and working pattern of our society. The first time everything from business, innovation, and education came to home through online mode. The current study attempts to focus on the use of technology in online Architectural Education and using case how it is attempted in SAPD, ITM University under the able guidance of the Council of Architecture. The research employs an integrated approach of use of online classroom mode in the best way to make it interactive, result-oriented, and output generation to meet the goals of Future Architectural Education. All the graphics used are screenshots of the live classroom, webinar, online MOU done of SAPD done in 2020.seeing the sudden pandemic in Feb 2020 a detailed action plan was prepared so how to take the Architectural education on online mode and especially the Architectural Design Studio Education improvement measures.

**KEYWORDS:** *Architectural Design Studio, Architectural Education, online classroom mode, Pandemic, SAPD*

## I. INTRODUCTION

Architectural Education is governed by the Council of Architecture. The Architect's Act of 1972 regulates the practice of the profession and the guidelines framed thereunder. The architectural profession feels deeply concerned towards national priorities in the fields of energy conservation, ecology, environmental pollution, protection and preservation of architectural heritage and its precincts, low-cost housing, urban renewals, rural upliftment, economic development at local and district levels, etc. in the interest of quality of life both in rural and urban settlements. [2]

The scope of the profession had grown wider and demands resources of complex nature. Humanities, Science, Art, and technology complement the field of architecture with their expertise with wholeness, rationalism, and imagination. It calls for originality, creativity, conceptualization, perception, aesthetic values, and a holistic judgment of people, places, objects, and events. [2]

During the sudden lockdown which was done in mid-Feb 2020. The architectural educators were much more active to innovate and adopt technology to give the best Architectural Education in the pandemic through different online modes available at their level. The initiation was taken by COA, TRC to educate all the educators of different institutions through online webinar platform to educate them in basic platforms to be used and how to engage and teach the different architectural subject to the best using online modes.

## II. DATA & STUDY AREA

We at SAPD, ITM took full advantage of this COA, TRC training, and also various internal online mode training to take architectural education ahead at the ITM University level and worked on a detailed road map and action plan to deliver this semester planning, webinars, online industry visits plus future MOUs to take the architectural Education at next level. In this COA, TRC Faculty development program faculties from SAPD participated and gained enough information and details on how to conduct the Architectural Education on online mode and most importantly how to assess the students at a regular level.

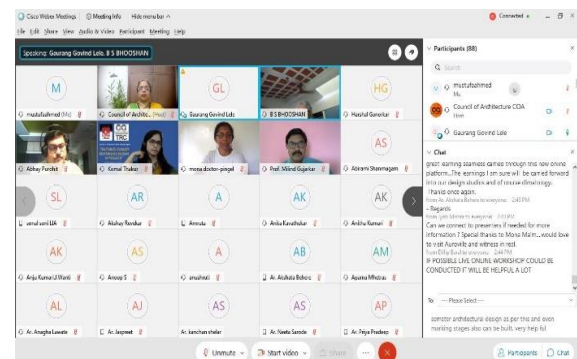


Figure 1 COA, TRC, Faculty Development program (classroom screen shot) [1]

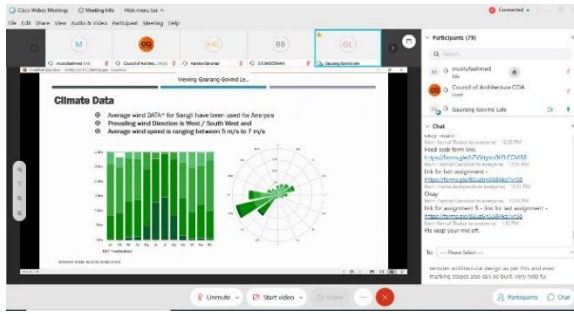


Figure 2 COA, TRC, Faculty Development program (classroom screenshot) [1]

After going through this series of online webinars initiated by COA-TRC from Feb end to March a detailed road map was planned and mapped through ERP and continuously monitored to see the objectives achieved. To make the classroom like normal informal studio discussions opportunities were given through classroom mode to do that with an additional advantage of multiple case learning for students as they get to listen to the comments suggestion and changes for all and if a live assignment given in the classroom the marking and reasoning of a teacher is also available to improve upon. The use of Case studies and SWOT analyses live classroom discussions helped to a deep understanding of the design problem and gives clarity.

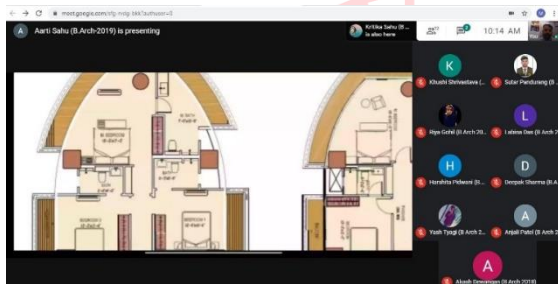


Figure 3: online Architectural Design studio class (classroom screenshot) [1]

Other than the case study live studio very interesting methodology to take individual design case on online mode and give comments applicable for all referring to individual work which keep all engage and at the same time to evolve ideas while referring to other design work in the classroom.

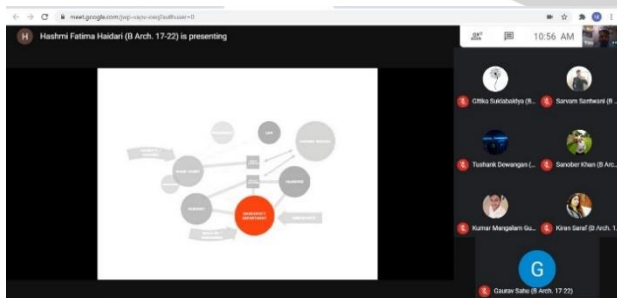


Figure 4 online Architectural Design studio class (classroom screenshot) [1]

Other than regular classes, online assignments for theory subjects it was important to continue with regular industry visits and market exposure which is key for architectural

education. So, for this on online mode also it was researched and collaborated with an event organizer who brings all industry to one platform to expose about products strength and market rates. ITM SAPD collaborated with Locator for this and organized a series of online industry visits and webinars to gain market exposure.

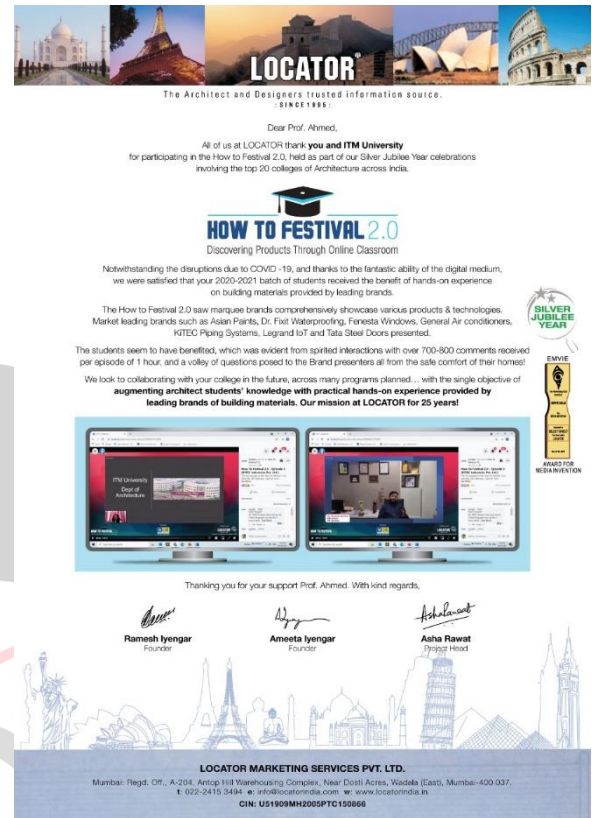


Figure 5 online Locator appreciation letter [1]



Figure 6 online Locator token to Participant College [1]

With the online extension activity on online industry webinar and visit it was also planned for future growth of architecture education collaborating with prime institutions in India to give the best exposure to students of Architecture.

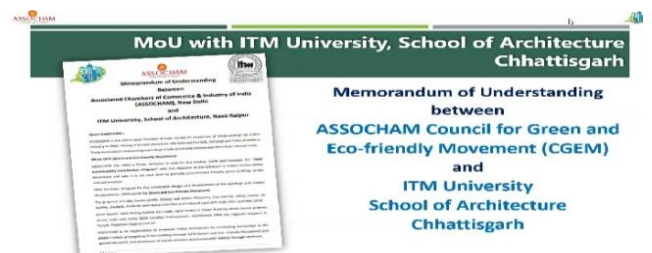


Figure 7 online MOU with GEM-ASSOCHAM [1]

For this ITM, SAPD now collaborated with GEM ASSOCHAM through the GEM-ASSOCHAM Chhattisgarh chapter and did a historic online MOU during 2020 on online mode. This MOU would allow students to learn and work on live projects in Chhattisgarh for assessment of green rating for various projects and make them expose to sustainability issues which are going to be prime for future architecture.



Figure 8 Online webinar with GEM-ASSOCHAM [1]

Good technology support has now become key for Architectural Education as well as a new model of online work also required to be learned by students of Architecture as future is online mode only and even from concept finalizations to presentations to competitions and now building permission has gone to online mode.

Students were also encouraged to participate in online design competitions in this time, so they get more ready for what market times coming.

### III. PERFORMANCE ASSESSMENT OF STUDENTS IN THEORY AS WELL AS DESIGN STUDIO IN ONLINE MODE:

A detailed methodology was adopted to formulate the assessment to ensure the output of real online teaching is achieved in Studio as well as theory in two methods. All the theory subjects as having internal and end semester exams. So to make the internal rational and justifiable with students work with quality on time is kept through 3 CT in one semester online as an assignment in google classroom with start and end time of the class with a teacher in the class as well all students plus one portion marks is left other than

this 3 CT for a class teacher to assess students based on attendance as well as performance in class

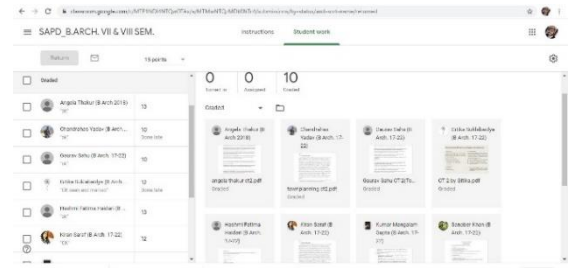


Figure 8 CT assessment for theory in online classroom mode [1]

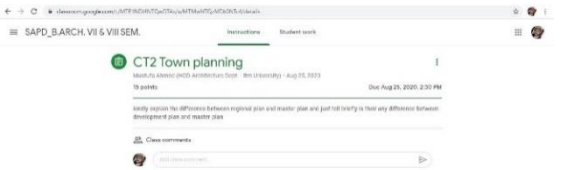


Figure 9 CT assignment given in online classroom mode. [1]

Other than this theory a very effective tool used for design studio end semester exam as well as internal marks to through classroom assignment at each stage and total is added for final, so a continuous proper assessment is done for the student.

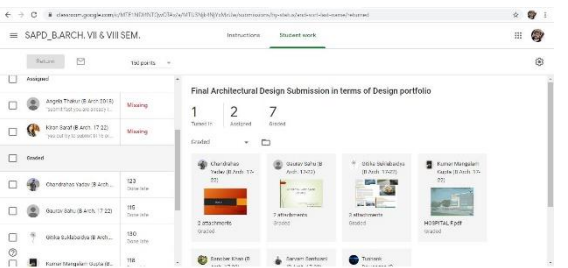


Figure 10 assignment for internal Architectural Design studio classes for internal continuous evaluations [1]

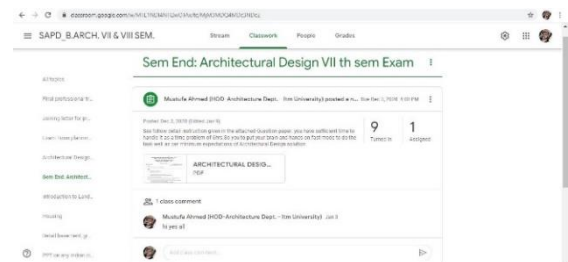


Figure 11 assignment for End Semester Architectural Design exam for Semester end [1]

So a very clear method derived online to balance the quality of teaching on the studio as well as a theory with proper assessment mode which is key

### IV. ACKNOWLEDGMENT

I would like to acknowledge the IT team of ITM University to assist us continuously to update this live research in Architectural education and properly linking it to assessments, attendance, feedbacks to form and end to end



system through assistance by creating a well-functioning ERP system as well as this classroom mode to function the semester-based output based architectural education system.

## V. CONCLUSION

Post pandemic 2020 now the Architectural Education is taken in much better fashion with market and technology-focused very adaptable to future of Architecture globally in SAPD, ITM University and now will have to expand with new further virtual technology for even online computer application which would be next key as the time is already for this.

## REFERENCES

- [1] ITM, SAPD Classroom screenshots. (2021).
- [2] Preamble. (2014, November 7). *Council of Architecture*. Council of Architecture. Retrieved from [https://www.coa.gov.in/index1.php?lang=1&level=2&su\\_blinkid=298&lid=85](https://www.coa.gov.in/index1.php?lang=1&level=2&su_blinkid=298&lid=85)

