

The Village Needs Attention: Collaborative and Participatory Design Studio Process in Teaching Rural Architecture

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ABSTRACT

Looking at the village through the lens of ‘romanticism’ often frames a village with thatch-roofed courtyard-centered houses, situated within a green-blue landscape. The people are not placed in this picturesque view, and their day-to-day life activities are ignored. The rural-to-urban migration, changing landscape and profession due to climate change, loss of agricultural land, etc. need careful attention. Because of the rapid growth of urbanization and associated infrastructure, every year Bangladesh loses 0.3% of its cultivated land, where the country is still mostly agrarian. Again, the short-sighted yet populist political statement- ‘Village will be the city’, looks for immediate ‘action’ leaving the ‘romanticism’. Frustratingly, rural planning and architecture are not well placed in the curriculum of Architecture. Professionals who will shape the future of the built environment, if unaware of a context, can’t act in an informed way. Four residential workshops were conducted in the Department of Architecture, DIU during the 2018-2021 time period, under an initiative titled ‘Grammo’, by the author. The residential workshop tried to look at the architecture of the village within a broad spectrum of socio-cultural and environmental events. Therefore, the participation of local stakeholders as well as the social hub was carefully included. The outcome of these workshops searched for need-based project ideas, which are then practiced either as class projects or documented digitally. These project proposals/ documents were displayed in those villages for user feedback. The paper aims at sharing the participatory process and outlining a participatory framework so that a new method of teaching rural architecture can be formulated in the design discipline.

Keywords: Participatory process, Community engagement, rural Architecture, Rural Studio

INTRODUCTION

Though the rural-to-urban migration is rapidly increasing every year, the rural areas in Bangladesh provide space for 72% of her total 156 million population in 2014 (BBS, 2015a). Agriculture is not anymore, the only income source for the rural people. Rural Populations producing food, sending remittance, and providing domestic labor to export industries have progressively contributed to reducing rural poverty from 35 percent in 2000 to 26.4 percent in 2016 (BBS, 2017). Due to the developments of mobility, access to technology, better power connections, increased women’s education etc. occupational change in the village are obvious. We have witnessed a remarkable occupational diversification from farm to non-farm livelihoods, and innovation through the rise of landless tenancy in rural Bangladesh (Sen, 2018). Still, the Household Income and Expenditure Survey 2010 shows that the percentage of people living below the poverty line is much higher in rural areas than both the national and urban levels (BBS, 2010). Researchers have found the unconstitutional techniques allegedly practiced by the Microfinance institutes in the villages, result in the borrowers falling into the borrowing-repaying cycle (Islam, 2018). Also, the flow of foreign remittance in the villages resulted in drastic changes in the built environment, which follows the urban solution of living to maintain a standard of living. The draft Agricultural Land Protection and Use Act 2016 and the draft of Urban and Regional Planning Act 2017, aims to prevent unplanned urbanization and to protect agricultural land and wetland. Through rapid urbanization pressure and demands for non-farm use, these laws are violated. Within this situation, the political manifesto of the 2018 national election campaign

of the ruling government was-‘গ্রাম হবে শহর’/ Village will be the city which primarily focused on infrastructural developments without any concern of local issues (League, 2018), started a debate or criticism in the social media but not in a national scale. Though this is a good sign that rural development has got prioritized in the national election manifesto, the social debate focused on careful strategies for rural development, so that the characteristics feature of the village primarily as an agriculture production hub are maintained and the built environment should be careful to all life form, not only human. Also, the proto-type strategies that are followed by the government in most of their projects should be critically looked upon in the case of the village, as each village landscape demands a unique solution.

These developments and yet existing harsh realities underlie an ongoing transformation without much concern to its existing context or a resilient future. Therefore, villages pictured during the time of Rabindranath Tagore, as ‘ছায়া-সুনিবিড় শান্তির নীড় ছোট ছোট গ্রামগুলি’ (Small villages nestled in shady peace) is not a reality anymore and demands an informed solution.

Rural Architecture and planning in Architecture curriculum

Absence of rural architecture/ planning in the course curriculum: Though 70% of our population is still living in the villages and the transformation of the villages needs special attention, the curriculum of Architecture discipline, barely offered courses on Rural Architecture and planning. Out of 26 architecture schools in Bangladesh, the author has found only two private school offer courses on Rural Architecture (2 credits) and Rural Planning (2 credits). A few schools have recently started practicing rural projects in fourth-year studios. The Future of Jobs Report by the World Economic Forum highlighted three skills (3 C’s) that will become essential for thriving in the Fourth Industrial Revolution – Complex problem-solving, Critical thinking, and Creativity (WEF, 2016).

Formal architectural education started in Bangladesh in 1961 through the Bangladesh University of Engineering and Technology (BUET) under a USAID program (Parvin, 2019). The architecture department was initially staffed by a Professor from Texas A&M University and the curriculum was modeled following the Texas A&M (Tigermann, 2011). The school followed the most up-to-date and modern pedagogy known of the German Bauhaus, which was by this time dominant in the US and Europe (Parvin, 2019). The unintended consequences of this teaching approach were a pedagogical disconnection to the place, people, and culture of Bangladesh, and to the architectural heritage of Bengal in particular (Benninger, 2012). Over the decades, when additional schools of architecture were established, they also followed the BUET model.

This is a very important issue, as to why a majority of the school’s curriculum focuses more on the city/ urban issue, rather than the rural dynamics. Also, the teaching pedagogy that needs to be followed to conduct a research or project in a complex situation of a rural area, is not yet explored.

The need to ‘act’

John Dewey termed his theory of education as learning by doing in *My pedagogic creed* (DEWEY, 1897).

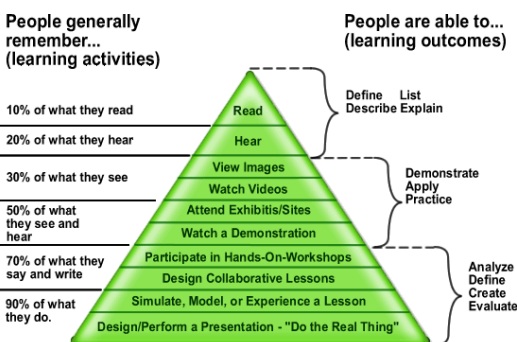


Figure 1: Learning Pyramid or Cone of Learning by Edgar Dale, 1946

The learning pyramid or the cone of learning by Edgar Dale is still a much-appreciated model of teaching pedagogy where design/ performing by doing has been identified as the base of the learning pyramid.

Ivan Illich in his *Deschooling Society* (1971) focused on unhampered participation in a meaningful setting as a precursor for most learning and states the importance of attachment/ engagement (ILLICH, 1971). In the model of Montessori and Reggio engagement-based environment for teaching was developed (RINALDI, 2005). The design studio process of Architecture is identical, compared to other disciplines due to the requirement of a substantial amount of student engagement needed to solve a complex design problem. Also, the involvement of experts in the studio process is a common practice and the outcome is shared with the wider community through exhibition or publication (Figure 2).

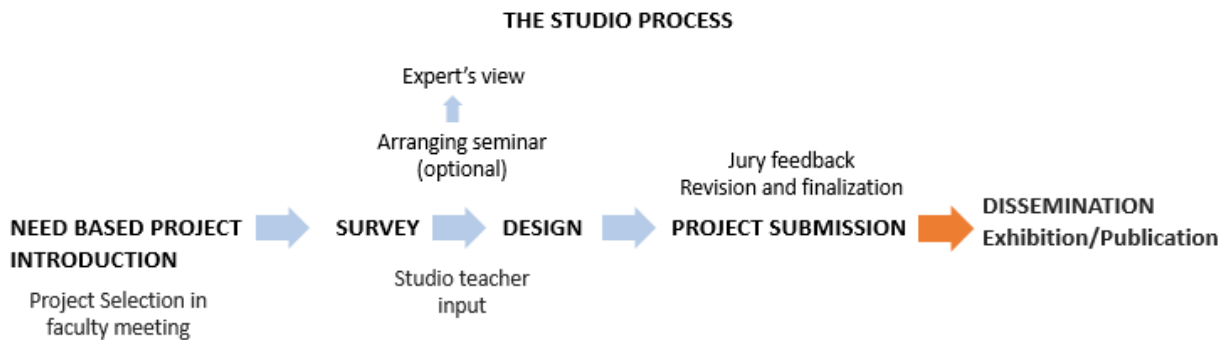


Figure 2: Design Studio process in 4th Year, DIU, prepared by the author

Therefore, starting a rural project in the studio the author was challenged as the context of the village was new to many including him. To understand the context, a 3-day residential workshop module was designed named 'Grammo'. From 2018-2021 four workshops had been conducted with the assistance of several persons and organizations. The collaboration and participatory tools are the strength of this workshop.

METHODOLOGY

The research had taken a qualitative approach by identifying and engaging relevant stakeholder groups through interviews, focus group discussions, informal discussion at homestead and community places etc. The researcher had spent 3 days in each of the four workshops conducted in the villages of Kautiya-Manikganj, Khidirpara-Munshiganj and Ekhlaspur-Chandpur.

The villages were selected knowing the need for village development from the residents/organizations of the village. During the planning and conduction of these workshops, a number of activities had been carried out, which can be divided in three part- pre- workshop, workshop, and post-workshop.

Pre workshop includes **Selection of the village** through interest from a stakeholder of the village, **managing permission of homestead survey** from the user and the local govt. through the interested stakeholder, circulating **workshop invitations** on social media, and creating a participants group.

During workshop **community visits** by different student groups; **interviews** of community members, local govt. representatives and influential persons, **informal discussions** with the community members, invited experts; structured **focus group discussions** with different communities (with special concern to women and farmers) in their homestead and community spaces; **local market visits** to know the materials availability and discussion with the businessman; **inclusion of experts** for a specific topic, evening **world café** to summarize the day time findings,

preparing posters to reflect understanding and documenting the fresh information. Post Workshop activities include **collaborative digital documentation** of workshop contents, **student involvement in outlining**

projects for academic exercise, **dissemination of knowledge with the community** and stakeholders through an exhibition and finding scopes to implement ideas. All the activities were collaborative in nature which will be explained in the next phase.

A brief detail of the workshop location and participants are given below:

	Grammo- 1	Grammo-2	Grammo-3	Grammo-4
Location	Kautiya, Manikganj	Khidirpara, Munshiganj	Khidirpara, Munshiganj	Ekhlaspur, Chandpur
Participant (nos.)	18	15	4	15
Experts (nos.)	1	3	0	3
Homestead survey (nos.)	12	11	3	9

A very important issue of the village is to select one. Due to the convenience of the researcher and the student group, the location near Dhaka City was a priority. When there was a particular interest from a person or a group from a specific village, regarding rural development, then they were approached, the process of the workshop was shared and the expectation from the person or the group (contact point) was collected. When there was a common understanding of the vision, the village was primarily selected. These discussions give important insight into the village and help in preparing the itinerary.

Besides the homestead survey in every workshop, there were some requirements from the contact point. In Grammo-1 workshop transformation of rural house patterns and natural agriculture, in Grammo-2 options of rural empowerment and cultural heritage, in Grammo-3 the house building industry and in Grammo-4 challenges of living and legal rights of the differently able people. The researcher believes that the selection itself can reflect the collaborative/ authoritarian attitude and it's important that the village owns this workshop.

After the preliminary selection a written letter was sent to the local government (chairman/ vice-chairman) mentioning the itinerary of the 3-day residential program, meeting schedule from them, and homestead survey permission. This letter is sent to them through the contact point, which helps in the survey process.

After the selection and itinerary is finalized, a call for participation and a google form was shared through social media explaining the workshop objectives, activities, and schedule. The form helped in understanding the participants, their interests, and expectations. After paying the participation fee, the workshop participants' WhatsApp group is formed. A meeting prior to the workshop explained the uniqueness of the research program, the transportation would be a public vehicle, the accommodation in a rural homestead (collaborative mindset) and food had to be bought by the students.

In this way, the struggles of village life could be more experienced. It was made clear that it was a consciously curated workshop, not a leisure tour.

Workshop Activities:

The activities performed in the workshop focused on being 'active' and the 'learning pyramid' teaching pedagogy was followed. There were ample scopes for the participants to survey, discuss in their own way with some major topics/questions in mind, and then discuss with other groups in the world café to validate the findings. After a long discussion, the data were documented through poster making.

In general, the group reached the village, a day before the workshop begins. This allowed internal relations

to build up, knowing the context, formation of working groups, and methods that were followed. The working groups were formed from the interest of the participants, allowing them to be connected with the process, there was no pressure from the facilitator. Also staying at the village house in a group of 4/5 participants in a room allows good interaction before the workshop.

Community visits: pre-formulated groups of 3 to 4 participants visited door-to-door in the case of the homestead survey. The groups took measurements of the houses by measuring tape, drew homestead layouts on the paper, and recorded certain environmental parameters (air flow, temperature, humidity, and daylight level) with the help of an anemometer, thermos-hygrometer, lux meter respectively, relationship of the courtyard and surroundings with the help of free hand proportionate sketch, identifying types of plants in the homestead layout plan etc. The discussion with the users mostly happened in the courtyard or semi-outdoor space. Other groups were assigned to survey the community spaces (bazaar, river side, school field/ gathering points etc.), cultural practices, agricultural production and occupation, education, health, and hydrological system. Besides these topics, Grammo-4 specially focused on the legal rights of differently able people.

All the data were collected through informal discussions with related persons (elder people, school principals, local leaders, influential persons, etc.) though there were some specific questions (Figure 3). These 3-day visits were an eye-opener, as the participants faced real-life scenarios, actual problems, struggles of village life, etc. which was not possible otherwise in a one-day tour.

The findings of these visits, lead the participants to complexities where designing the built environment seemed to be related to multiple factors. Since the data collection may vary and there is a possibility of misinformation, the important data were discussed during the evening session, and local influential senior persons (teachers, chairman/ member) were asked for validation.



Figure-3 Data collection during community visits of the workshop

Informal discussions

Being in the village, the very presence of nature, allowed to conduct the sessions in an informal setting. Several discussions happened beside the pong ghat, under the banyan tree or shaded outdoor place, etc. (Figure 4).

After the whole day survey, game/ gossip was a common activity. Afternoon/ evening time was free for the participant's personal time. Also, the informality resulted in spontaneous interaction among the participants



Figure- 4: ‘Informal’ setting for discussion

Structured **focus group discussions** and meetings with the Local Vice Chairman/ chairman was an important activity to know about the proposed projects and future development possibilities in the village. Also, this activity was performed on the second/ third day, when the participants had a good amount of knowledge about the context and could discuss/ ask questions on critical issues. These sessions are performed in Union Parishad/ public places/ shops as per the preference of the govt. side and were attended by all the participants.

Local market visit Allowed to know about the available building materials, their prices, the seller’s perspectives on the building material industry, and trends. A group of 3 to 4 participants were given a topic to collect the necessary data. Also, the transportation issue, the original source of materials (local/ imported), modules, etc. were surveyed in detail. The cost of a rural house is very low, and the architecture curriculum rarely trains the students to work with this budget. Therefore, to understand the elements of a low-cost house, the market visit was mandatory.

The inclusion of different experts in relation to different village contexts enriched participants’ knowledge and added a new perspective to their thought process. In Grammo-1 and 2, Delwar Zahan shared his knowledge of the politics of agriculture and living a natural life. In Grammo-2, Faisal Huda and Nusrat Ishtiaque Zahan talked about the village as a cultural heritage and low-cost house respectively. In Grammo-4 Mr. Monirul conducted a handicraft workshop for two days with rural women and shared with them new patterns (Figure 5), techniques, and tools. In this way, the participants not only widen their knowledge but also build new networks, a very important pedagogy of modern education. The inclusion of the experts was done based on personal relation with the organizer, the willingness and available time to work with a community, common philosophy about rural developments etc.



Figure 5: Engaging session by Mr. Monirul during Grammo-4 workshop

World café and preparing posters

World café, is a participatory assessment tool widely used in qualitative research to understand strengths

and weaknesses in comparison to semi-structured interviews and focus groups. But research shows that, when there are many participants, it helps guide the exploration and verification of themes (Löhr, 2020). As the amount of data collected by the different participant's groups needs discussion and verification, these techniques were applied. A group raises a topic, which is discussed, and all other groups give their feedback and facilitators also give their input. After thorough discussion, revised information is documented in the poster. In this way, data are verified, and some unresolved issues are noted down for experts/ senior citizens of the village. The collected data are documented each day so that no data are lost.

Sketches, diagrams, and measured drawings are documented in this way by the participants with the active guidance of the facilitators. The medium of language was Bengali. As the participants are from different backgrounds and institutions, a diverse presentation style makes the session very lively and innovative.

These posters also generated some ideas about the intervention area that can be taken as an academic exercise. All the posters are produced in hand which becomes a display material also and talks a lot about the workshop. All the contents all photographed so that they can be shared with all the participants.

Post-workshop activities include digital documentation, academic project exercise, sharing sessions, and planning for the next.

Collaborative digital documentation: The contents produced are then mailed to different participants to make a digital version of it. As the first two workshops were attached to the academic project, there was a deadline and grade. But during the pandemic, as the academic activity had restrictions, Grammo-3 and 4 were not a part of the academic project of the participants. Therefore digital documentation took much more time than anticipated. But the site survey and findings of the Grammo-4 workshop served as a guideline for an academic project of a junior studio.

Academic exercise: After the digital documentation of the existing context of the village need-based design project is introduced in the design studio. It was in contrast to the existing practice, where a project was selected at first and then a site survey was done.

The researcher believes, as the context of a village was new to the participants, it was wise to select projects for academic exercise during or after the workshop, not before experiencing the context. The experts attended the workshop, the participants from other institutions, and the community person were involved with the academic project.

In the case of Grammo-4, the participants of the workshop acted as supporting teachers of their junior batch (who didn't participate), and were given an academic project based on the workshop findings. Also in online sessions of project initiation and evaluation, two of the stakeholders from the village were present.

Dissemination of knowledge: It was a good experience for the researcher, to share the activities done after the workshop to the community again. The contents language was in Bengali, keeping in mind that the villagers may read those. Also, the printed contents were hung through the jute thread under the banyan tree (daytime) and Local bazar (afternoon time).

An animation on the local bazaar future development proposal was shared in the chairman's 'chatal'/go down using a projector (carried from Dhaka) (Figure 6).. The exhibition got a huge response from the community, though there were rejections of some ideas too.

The community as well as the students were not experienced in this type of communication, which was a great learning. Besides the exhibition, the process of the workshop or the experiences were shared in the national daily, seminars, radio, etc (Figure 6).



Figure 6: Knowledge dissemination through the exhibition (top left, middle) and Radio (right)

Implementation Partner

All the documents produced during the workshop can be written as a project proposal (Background, nature of the problem, intervention area identification, proposing solutions, etc.), that can be shared with a probable implementation partner who shares the same vision. The proposal has its own merits as it involved the users, students, local government, and influential people in the process. As community participation is an important indicator to achieve SDG goals, the project proposal may get the attention of many. The budget preparation can be done through university or institute involvement. Also, students can be involved by taking one part as a capstone project or during the implementation as an intern.

DISCUSSION

From the outset of the above-mentioned process, a diagram is produced depicting the participatory process of the workshop. This diagram depicts the need of changing the design studio pedagogy for rural contexts. As the rural context is not exercised in the mainstream studio process, a residential workshop ensures quality data collection. Also, this process is an attempt to reach the marginal people and raise their voice. Therefore the activities performed during the workshops depicts the strengths of the tools to collect information.

The pre-workshop activities performed using digital media saved travel time, introduced the participants to their interests, and explained the workshop process, guidelines, expectations etc.

The workshop activities are in line with previous literature of Tanzil Shafique who referred to this process as an ‘enactive pedagogy’ a term describing the practice of engaging with real-world situations in the studio setting and the co-production of knowledge, revising classroom model that is clearly unfit for a critical pedagogy geared towards the 21st century (Shafique, 2018). Local market visits to understand available materials and their cost is an eye-opener to the students in understanding low-cost buildings in a rural context. Involving local government representatives not only helped to know about future development direction but also scope to create a network for future involvement. The inclusion of experts is found to be a challenging task, as there is no formal collaboration, and is done based on the personal relationship. Though, this inclusion is mandatory to see the rural context from different perspectives, which is neglected by architects often.

Students are highly benefitted to be connected with this extended network and interacting with them. Data validation through the World Café module was found very important, as different groups often collected contradictory information, which needed attention and sometimes re-structured the next day’s schedule. Students get exposed to opposing theories during these sessions and need to have an open but logical mindset to receive other opinions, which ensures healthy learning methods. Preparing poster on-site, documented much small detail from the survey, which depicts the effectiveness of Edgar Dale’s learning pyramid.

The effectiveness of the post-workshop activities depends on the commitment and organizational skills of the workshop coordinator or academic institutions. After the workshop collecting digital documentation from the students is a challenging task unless the workshop is part of an academic project or an exhibition to present the findings can be organized. Inviting the stakeholders during the project evaluation/ jury was performed to ensure a standard discussion and learning. Also, stakeholders felt empowered to contribute to the process. Students were involved in organizing the exhibition by themselves that not only developed their teamwork but also the curation for the rural community was learning to them. In other cases publishing an article or research paper can be thought of to motivate the students to submit their digital works. Using 'Bengali' as the communication language to disseminate the knowledge, was fruitful, as the local terminology could grab the attention of the target group easily. Students got to interact with the community directly on their proposed design and get first-hand feedback beyond their studio project evaluation. So, typically in the design studio, a project ends after a public jury, but in this case, this offers an extension of the project toward real-world feedback from the users. Documenting all the outcomes to get an implementation partner is visionary, but producing content as per the proposed partner's vision needs to be taken care of. Therefore, a list of possible partners can be done while planning this workshop at the very beginning, so that relevant information can be collected during the workshop by the students. Producing an outcome in line with a probable partner organization helps students with standard data collection procedures and be more responsible for the work.

From the above discussion, a Rural Studio pedagogy (Figure 7) is formulated where the important milestone of the process is placed horizontally and the related concerns with activities are placed vertically above each milestone.



Figure 7: Proposed rural studio pedagogy

CONCLUSION

We should be careful not to excessively appreciate/ discount a village and should be fair in investigating it. This paper generated a rural architecture pedagogy for teaching by engaging students actively through a multi-disciplinary approach. Unlike traditional studio project ideation, the academic project was generated on-site during the workshop, without any preconceived notions of what could be a rural project. But it enacted students into intense design thinking and more engaged as he had to propose his project. Also, students learned how to collect valid information from marginal people through a number of pre-planned activities. The whole process ensured a blend of soft skills and hard skills. The activities performed thus act

as a tool kit for participatory rural workshop conduction. The summation of all the activities has the strength to plan for a Design-Build module in the next ‘Grammo’ by involving an implementation partner.

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