

Managing Architectural Education in Bangladesh – A Need for a Change

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The method and curriculum of architectural education have not changed significantly since the time of Vitruvius. Only the tools and techniques and the field of specialization show a remarkable change over the years. The pedagogy in architecture shows a need for change in the context of current trend and demand in practice. There is an increase in the number of institutes offering architectural education, number of students, and graduating architects in Bangladesh, especially in recent times. At the same time the current trend of development work has created wider opportunities for graduating architects not only in their own country, but also to different places of the world. The above trend compels to rethink about architectural education and the future of the graduating students in Bangladesh. This paper describes the above trend in architectural education, identifies and discusses the present problems and limitations of the education system. An alternative approach based on evaluation and reviews from different experiences is searched. The prospects of sharing knowledge and information through exchange programs, distance learning, using inter-net, organizing workshops and so on is reviewed. Review of relevant literature and individual experience in the academic and professional field is the methodological tool used in this paper. The paper is based on desk-top research on published materials from prospectuses, papers, books and articles related to architectural education in home and abroad, personal experience in academic and professional field and discussion and unstructured interview with renowned educationists and professionals in the field of architecture in Bangladesh.

Keywords: Architectural education, regionalism, trend, link program, evaluation.

1. Introduction

Vitruvius outlined the basic curriculum for architectural education as “Let him be educated, skillful with pencil, instructed in geometry, know much history, have followed the philosophers with attention, understand music, have some knowledge of medicine, know the options of jurists, and be acquainted with astronomy and the theory of heavens.” (Broadbent, 1995) The overall method and curriculum of architectural education have not changed significantly since the time of Vitruvius. Only skill and technology has changed and also the accessibility to information through inter-net and other advanced techniques have increased. The theories that have changed over the years have been greatly expanded.

Institutional architectural education in Bangladesh, started in 1961, has passed through more than four decades within which the context has changed. The rapid

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growth of population, expansion of development works in public and private sectors, changes in public awareness regarding architecture, have created a demand on expansion of architecture as a profession, and hence its education in this country. The current trend compels to rethink about the architectural education and the future of the graduating students in Bangladesh.

The paper starts with discussing the beginning of architectural education in Bangladesh and its trend. The problems and limitations of architectural education are outlined and different experiences to mitigate the problems in architecture education are reviewed. The prospects of sharing knowledge and information through exchange program, distance learning, using inter-net, organizing workshops and so on is reviewed. At the end of the paper, an approach is searched to address the identified problems.

The paper is based on desk-top research from published prospectus from different universities, papers, books and articles related to architectural education in home and abroad. The author's personal experience in the field of education and profession, as well as discussion and unstructured interview with renowned educationists and professionals in the field of architecture in Bangladesh supported to build up the recommendations. The hypothesis of the paper is that to meet the urging regional and global need of architecture, Architectural Education in Bangladesh should update and change with the changing need and demand. Consequently the future Bangladeshi architects would get better work opportunity and responsive to user's needs, society, economic, disaster preparedness and overall sustainability.

2. Trend in Architectural Education

2.1 Beginning of Architectural Education in Bangladesh

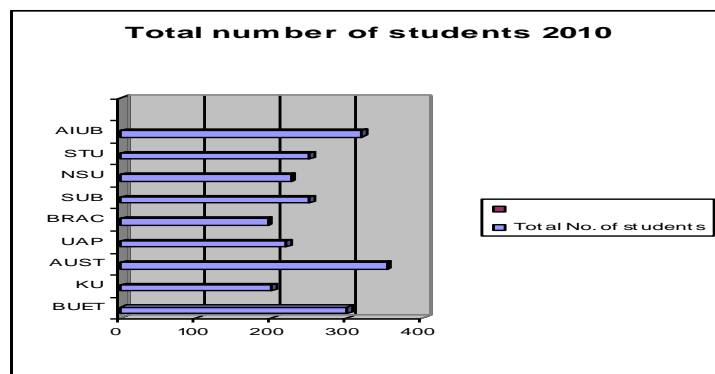
During colonial period architects and surveyors from the UK carried out architectural projects in the country under the supervision of the Construction and Building (C & B). They had very little knowledge about geography, site, climate and culture of Bangladesh. A number of local draftsmen also worked with the foreign architects. There was no local architect to take these responsibilities as the profession was unknown. During fifties amount of development works started to increase for the new country. Most of these were done by the foreign architects; and hence it was felt necessary to train professionals from within the country. The foundation of the department of architecture was laid in the East Pakistan University of Engineering and Technology (EPUET) in the early sixties with teachers from the Texas A & M University, under an USAID initiative. The department was opened in 1961 with only one foreign teacher, Professor Richard E. Vrooman, and six students at the EPUET. Immediately the authority felt the need to train locals to take up the responsibility of the department in future. Six basically civil engineering graduates were selected to become teacher of the department and sent to the USA to study architecture in 1963. By 1967-68 they returned home and took charge of the department. The first batch of graduates came out in 1966. The department moved to the new building designed by Professor Vrooman. It was his vision that a proper physical facility and environment were necessary for good architectural education. After the independence of Bangladesh in 1971, the university is now known as Bangladesh University of Engineering and Technology (BUET).

2.2 Current Trend of Architectural Education

Once there was only one educational institute for architecture. Presently there are around fifteen institutes in both government and private sectors. Along with four government universities there are eleven private universities offering facilities for architectural education; a few more are planning to start architectural education in future. All of them are now offering five years of Bachelor of Architecture (B. Arch) degree program. The BUET started an M.Arch program in 1979 and Ph.D in 2001. The Discipline of Architecture at Khulna University (KU), the second public university located in the southeastern region of Bangladesh, started their B. Arch program in 1991 to cope with the growing demand for architects in the professional field of work. With the passing of the Private Universities act in 1992, three private universities came up with their department of architecture consecutively. The Ahsanullah University of Science and Technology (AUST), The University of Asia Pacific (UAP) and the BRAC University started their B. Arch program in 1996, 1997 and 2001 respectively. All these private universities are based in Dhaka, the capital city of Bangladesh.

The annual number of intakes in all these universities shows a gradual increase in numbers over the years. The BUET started with six students in 1961 and has increased its capacity to 50 at present. In the AUST, the number of intakes has increased from 20 in 1996 to around 50 per intake in 2010. The private universities offer admission two to three times in a year while the public universities have annual intake. The following figures show the present state of student enrollment and number of faculty members of different schools of architecture. The total number of students varies between 200 and 350 in different universities. The number is increasing significantly in the private universities.

Figure 1: The total number of students in different universities



Note: Only BUET and KU are public universities, the rest are private universities.

The number of full time teachers is more in Public universities compared to the private universities and the teacher student ration varies significantly in different universities. There is no set standard for teacher student ratio, especially for studio teaching where one to one interaction is more important compared to the theory courses. The number of part-time teachers does not signify the total load carried by them, as their load can vary from 1 credit to 12 credit hours.

Figure 2: Number of Teachers

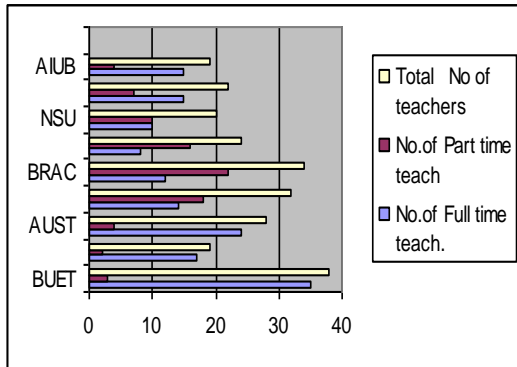
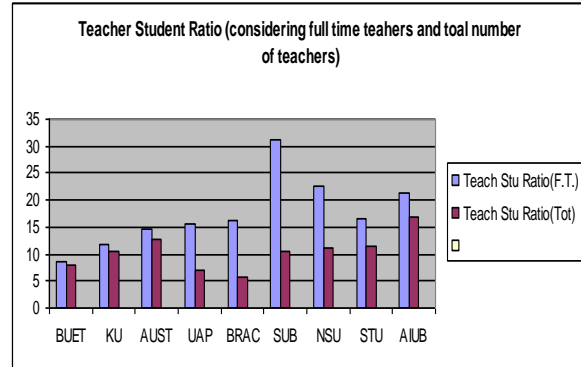


Figure 3: Teacher Student Ratio



Within nineteen years time 14 new schools are established which shows a demand for architectural education among prospective high school graduates. The private schools are more dependent on part-time faculties to minimize expenses and due to lack of available required faculties. Thus on the other hand they have more scope to involve professionals in architectural education by giving students wider opportunity to learn from practice. All the schools under study except the KU are in the capital city to attract more students and also to get the advantage of being in touch with professional field of work.

2.3 Course Curriculum

In Bangladesh the five years degree program is divided into ten to fifteen semesters/terms/ levels with two or three in each year. Architectural curriculum is organized as studio based teaching method and theories as a supporting of design sessionals. The main intention of the theoretical courses is to form a knowledge base in understanding and solving architectural design problems. As architectural education is multi-disciplinary and multi-dimensional, the theoretical courses involve a wide range of disciplines in the fields of arts, science and engineering. However, mainly two divisions, theory and sessional courses can categorize curriculum. Among the sessional courses there are design studios (I to X/XV), supporting sessionals (e.g. Architectural Graphics, Working Drawings, Computer Aided Design, Field surveys and so on) that act as fundamental tools to support studio courses and additional skills like Photography, Art, Sculpture and Graphic Arts where aesthetic and artistic qualities are nurtured among the students. The Design studios are arranged in an order that students start with

- Fundamental principles of design in First Year
- Functional aspects and ergonomics in Second Year
- Interplay of three-dimensional form with structure, function and climate in Third Year
- Complex urban issues in Fourth Year
- Designing a comprehensive whole project and final year thesis/ terminal project in Fifth Year. (Prospectus of all the universities under study)

In a study by Rahman M (2003), it was stated that “most of the architectural programs in the world ranged between 160-190 credit hours in 5-6 years with few 4-year non-professional courses.” The total credit hour varies between 200 in KU and

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171.5 in NSU. Comparatively the credit hour has decreased in the newly established departments. On an average the sessional courses takes up 55% and theory courses 45% of total credit hours. To give emphasis on design, the ratio of credits between sessional and theory Courses is progressively increased in higher levels. Also, in the design studios the ratio between the credit and contact hrs per week is progressively increased for the same reason.

Figure 4: Total Credit Hour

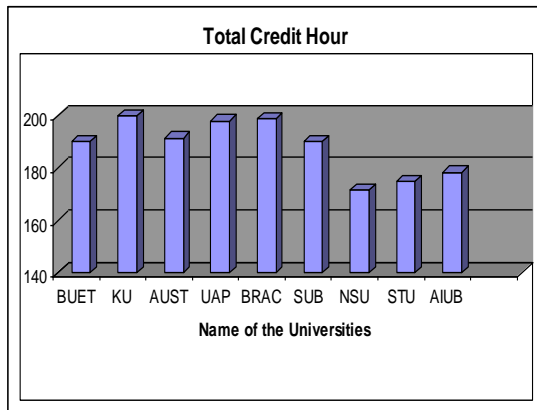
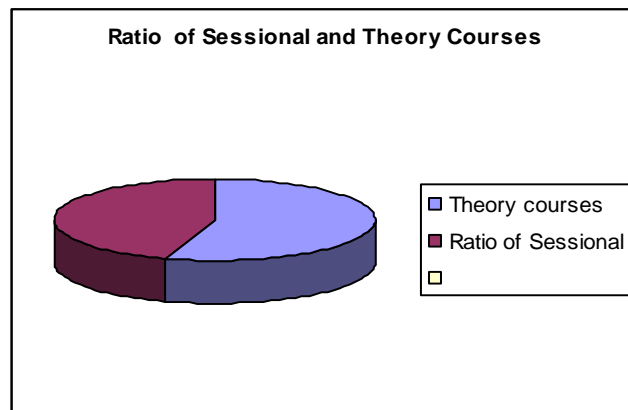


Figure 5: Ratio of Sessional and Theory Courses



A number of optional theory courses are offered from the institutes that vary from school to school depending on expertise available within the department. A detail comparative table on different universities is given in Appendix: 1.

The growth of educational facilities, the changes in public awareness about architecture, the changing role of architects in the society and impact of profession on development works demand change in the architectural education in this country. Now there is a time to ask how appropriate is our education to deal with the present state of architectural practice and need for architecture in future.

2.4 Scope of Professional Practice

The students face a different kind of difficulties when they graduate and start their professional work when they are required to deal with multi-faceted problems from client dealing, project management, preparing construction details, budgeting to construction supervision. The inadequate internship program along with architectural education may be one of the main reasons for creating gaps between education and practice.

There is no doubt that the area of practicing architecture is now much wider and accessible. Architecture as a profession was not well established before the independence of Bangladesh. Buildings designed by civil engineers and drafts-persons were not uncommon in Bangladesh. Gradually architects have been establishing their profession by designing several important public buildings. Now a day architecture and professional works are evident in different sphere of development projects.

Earlier the main client for architects was the Government and construction works were dealt by a number of selected firms. Now a day consulting firms are dealings

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with different field of works, for example residences and apartments, interior design, shopping complexes, office buildings, mixed-use complexes, industries and work-shops and many others. The role of architects has changed over the years. Architects are now needed to satisfy different kinds of clients like individual owners, different government and semi-government organizations, local and public authorities, and corporate clients and so on.

2.5 Regulatory Body

The University Grants Commission (UGC) was established in 1973 under the UGC of Bangladesh Order 1973. It is the statutory apex body in the field of higher education in Bangladesh. The main objectives of the UGC are to supervise, maintain, promote and coordinate university education and also to maintain standard and quality in all the public and private universities in Bangladesh. The UGC is attached to the Ministry of Education. It assesses the needs of the public universities in terms of funding and advice Government in various issues related to higher education in Bangladesh. The UGC's functions are to:

- assess the needs in the filed of University education and formulate plans for the development of such education;
- determine financial needs of the Universities;
- receive funds form the Government and allocate and disburse, out of the funds, grants to the Universities for their maintenance and development;
- evaluate the program under implementation for development of Universities, teaching departments, institutes and other constituent institutions;
- examine all kinds of University developments plans;
- collect statistical and other information on university matters;
- advise the Government of the establishment of new Universities or on proposals for expansion of the existing Universities;
- advise the Government on proposals to grant the right to confer special degree awarding status on colleges which may be considered suitable for such status;
- exercise such other powers and perform such other functions as may be conferred on it by any law or by the Government.

The UGC has the right to visit the Universities or to have them visited by team of experts as and when necessary for evaluating the program and assess their needs and requirements.

Most of the developing and developed countries established statutory control over the registration of architects within which the professionals using the title "Architect" are required to be registered (Holden G., 2006). The Institute of Architects Bangladesh (IAB) plays the role of the statutory body in Bangladesh. To be a registered architect in Bangladesh the candidate need to acquire a Bachelor degree in architecture or equivalent from a IAB recognized university, two years work experience under a member architect or IAB recognized architectural firm, registered as a candidate member for minimum two years and qualify the examination for registration. Recently IAB is trying to form an Accreditation Board in co-operation

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with UGC to maintain the standard of architectural education in all the public and private universities in Bangladesh.

3. Problems and Limitations of Architectural Education

3.1 Private vs Public Sector

The main objectives of the schools of architecture are to meet the growing demand for architects, to achieve and maintain a standard of education, and to instill in the students a firm intellectual and professional base. The initial curriculum of BUET was developed following those of Texas A & M, USA. The academic curriculum of the private universities is approved by the University Grants Commission, and is similar to that of the government universities with some changes in theoretical courses and teaching method. One of the reasons may be that the experienced educationists who had long been involvement with the public university (BUET) developed the curriculum for the new universities. In private universities students graduate in due time compared to government universities, where the academic schedule is often disrupted due to political unrest and other unforeseen reasons. Till now the private universities are free from students' politics or other factors that hampers the running session of the schools. Students with higher score in secondary, higher secondary and admission tests are qualified to get admission in public schools and their overall expenditure for education is minimum, compared to those in private universities. Private universities on the other hand give admission to students from most often the rest of the group desired to take architecture as profession and strive to prepare them for the same job market. Private universities enjoy relatively more freedom to develop their curriculum and method of delivery.

3.2 Transition from School to University Education

The transition through which a student passes from his/her school level to university level is crucial. There is a gap between the secondary school education and the starting of architectural education. Most of the students have a large leap and face difficulty when they enter into the architectural education. A limited number of students get a personally arranged short period of coaching before they appear for admission test which is not sufficient to orient the student for architectural education. When they enter university they have little idea about the curriculum, method of teaching and the overall system of architectural education.

The challenge to educate and train fresh higher secondary level graduate is immense. The very first challenge is to orient the students and to develop an attitude, which is markedly different from his or her previous learning method. Creativity – a well-known term in architecture is the challenge students' face from the very beginning of their sessional or design studio classes. As architectural education is multi-dimensional, students are exposed to different field of knowledge. It is expected to provide a student with a comprehensive knowledge about architecture so that he or she can deal with any design problem independently at home or abroad.

3.3 Link between the Theories and Sessionals

In the architecture schools in Bangladesh, there seems to be a little link between studio and theory courses. A number of the theory courses need to be redesigned and made appropriate for architectural students. Theory courses related to science, engineering, structure and other non-departmental courses (Logic, Philosophy, Sociology, Psychology, Music and Art Appreciation, Management, Accountings etc.) are offered that are more concise forms of those offered for their related disciplines. Students often find difficulties to establish their relationship to architecture and become less interested in those subjects. The importance of studio for professional practice is obvious. The educational institutes are striving to develop expertise in different fields that can enhance the theory and design studios, bring in new ideas and thoughts. Munasinghe Harsha (2007) stressed that the design studio 'as a site of equal partnership of students and teachers' to achieve the goal of acquiring knowledge and transfer.

3.4 CAD Drawings and its Limitations

Computer Aided Design Method was introduced as a listed course in architectural education in the early 1990s. Now all the schools have their own well-equipped computer lab to facilitate teaching and presentation of 2-Dimensional and 3-Dimensional drawings and other graphic presentations. These are used as technical tools to aid design presentation. Two decades ago emphasis was given to develop skill in pencil and pen presentation and detail model. These are now replaced by computer aided drafting, multi-media presentation, video, animation, perspective and computer aided graphics. There are debates in favor of and against the use of the concept of "Pen or Pentium". Hand drafting is still preferred at the primary levels of architectural studios, in order to bring out their creative ideas using age-old methods of sketching and developing ideas manually. On the other hand skill in computer graphics prepares a student for professional work at an earlier stage that professional practice demands now a day. The sole use of computer drafting perhaps impedes creative exercise, since a machine can only help to present the final product, not in its design.

3.5 Field Survey

Relevance of field surveys is another aspect that has to be given due attention. There are plenty of opportunities for students to get first hand knowledge from field experiences. The field surveys should also have relevance and direct link with design studios. To prepare brief, concept and contextual logic, students at fourth year level attempt to do physical survey. These are useful tools to develop. But there always remains a question to establish a direct link between survey and design solutions. Proper documentation of these surveys and results are not done so far for future use. Though these could be a valuable resource based on which students could develop their ideas and a good source of database could be prepared. The prospects of sharing information among different schools are not exercised as yet.

3.6 Attitude Building

One of the major challenges of architectural education is to develop an attitude among the learners to deal with the problems of architecture independently.

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Prescribed form of teaching is gradually forming a boundary limiting the possibilities for change, updating and bring out innovative ideas. The end product of studio works is getting more importance than the design concept, idea, procedure and actual knowledge gained throughout the process. Only developing skills is no longer valid in the present world, rather development of student's mindset through architectural education that can address present need and future demands is essential (Akter SM, 2007).

3.7 Jury Session and its Implication

There is a common trend to offer jury for judgment on final presentation of design. Rather it should be made as a session to learn from critical appraisal of the project and logic behind the decision making process. The students are also required to participate in the debate. Another observation is that often the students take the jury session lightly as they know that it is the end of their project and they barely keep the recommendations in their memory after the jury.

3.8 Importance of Contextual Learning

It is imperative to emphasize on the context as for example climate, geography, history, use of available building material and technology in architectural education. There is a shortage of published materials needed to enhance such theoretical base. Especially information and books related to local socio-cultural, climate, tradition, and geography is rarely available. Evaluation of existing facilities reminds how architecture still has deficiencies in the areas of climate consciousness, contextual identity and use of building materials and techniques. As Chao Padamse stated "Context must mean not only the buildings immediately surrounding the site but the social, economic, physical (natural and man-made), cultural and historical parameters, as well as the genius loci that inform the architect, even before he sets pencil to paper." (Padamse, 1998)

3.9 Update of Syllabus

Most of the schools in Bangladesh are following similar syllabus with insignificant changes in theory courses. Different universities in the developed countries have different objectives and curriculum, some are art-based, and some are technology based and some focuses on theory and research. A need for change and updating of architectural curriculum is obvious in the context of present need and demand in the professional field.

3.10 Felt Need for Research

The need for research in the field of architecture and planning is essential. As Sir Leslie Martin stated "Research is the tool by which theory is advanced. Without it, teaching can have no direction and thought no cutting edge" (Broadbent, 1995). The faculties of different local universities are trying to do research and publication works on their own initiative. Lack of research funding, opportunities to work and linkage among the researchers are working as a barrier for them to work efficiently. In majority of the cases, the output of research work of academics remains beyond the knowledge of the government authorities that are responsible for urban development.

4. Sharing Knowledge – A Review

Organizing regional partnership can open up a wide opportunity of sharing information, lessons learned in practice and academic field, more scope for research, publication and information dissemination. Working together through participation can be the goal to achieve through regional partnership. The importance of regional co-operation in strengthening architectural education can be explored from review and experiences of different institutions.

The International Association of Universities surveyed its institutional members on “The Practices and Priorities of Internationalization” at their institutions in early 2003. The survey identified the following reasons for giving priority to internationalization (Knight, 2003):

- Mobility of students and teachers is identified as the most important reason and as the fastest growing aspect of internationalization.
- Student, staff and teacher development; academic standards and quality assurance; and international research collaboration are identified as the three most important benefits.
- Distance education and the use of ICTs are identified as key areas for future development.

At the same time the survey also found out the following obstacles for internationalization:

- Loss of cultural identity and brain drain are seen as greatest risks.
- Lack of financial support at the institutional level.
- Lack of policy/ strategy, budget and monitoring framework for implementation.

The survey also explored that “Intra-regional cooperation is the first geographic priority for Africa, Asia and Europe” (Knight, 2003).

An analysis of objectives, goals and missions of architectural education in all the universities shows an aspiration for providing wider educational environment for students and teachers that strengthens their knowledge base on contemporary issues. To fulfill their desired goal different universities took different steps using means at their disposal. In general all the universities organize seminars, slide shows, talks and design exhibitions at their premises every year. The Department of architecture at BUET runs link programs consisting of study, lectures, and visits and so on with other schools and organizations. A research program was organized jointly with the participation from BUET, the AA school and the Building Research Establishment of the UK. The department of architecture at AUST has also invited faculty from international university to organize a short-term design studio. The BRAC University organized a seminar followed by a workshop that generated interaction between academics and professionals and exchange of ideas.

A round table discussion was held on “The Education of Architecture in Bangladesh-Future Direction” in 2006 participated by 60 architects, engineers and planners involved in teaching, practicing and administration arranged by the IAB, Department

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of Architecture of the NSU, SEARCH and the New Age. There were three interdependent issues that all the participants felt important:

1. That a school of architecture should stand on a solid philosophical footing.
2. That its graduates should be able to cater for the needs of the society, a capability to be instilled into the graduates through adequate curricula.
3. Architecture is basically a creative subject.

A number of participants stressed that all the graduates need not to be focused on design only; there should be other avenues to be specialized. They also opined that “architecture education should be divided in diploma, non-graduation and graduation, to provide flexible learning.”

5. A Search for Alternative Approach

5.1 Diversity in Curriculum

The differences between public and private universities, the locational impact on educational institute, the category of student intake and also the varied field of architectural work gives sufficient rationale for differences among educational institutes, their curriculum and method of delivery. Special courses can be organized from different institutes to open up a wide range of choices for architectural students. Special care is needed to improve the student’s verbal and written communication skill and to develop their management and team leadership role.

5.2 Prerequisite Courses and Internship Programs

Offering some prerequisite courses before entering into the university level can eliminate the gap between higher secondary and the entry level of university education. Garson Fiona (2003) focuses on ‘Foundation Program’ as a bridging year before entering into department of architecture that enables students to become more confident, creative thinker and participatory learner. There is also a need to develop a link between education and training. Perhaps internship can remove this disadvantage. Organization of courses should also take care of the need in the professional field to improve the present state of development.

5.3 Student’s Initiative and Self Learning Process

To develop student’s initiative, motivation to work, search for information and knowledge are the most critical part of architectural education. Thorough research on this subject is vital for a good school of architecture. An inspiring educational environment is essential to create that attitude. Students should be given more responsibilities not only related to academic work, but also related to extra-curricular activities. Motivating them to work, team spirit, and healthy way of competitive attitude have great effect on academic excellence. Experience shows that where the students feel competition among themselves regarding quality of work and creative endeavor, those classes come up with excellent performance.

5.4 Creating Contextual Awareness

There is a need to carry out projects from real life situations. The students are required to be conscious about local climate, vegetation, sites and surroundings, and to try to resolve problems architecturally. Critical observation on local custom, habit, culture and tradition are also essential for students of architecture. Also it is necessary to analyze local and regional works of art with precision so that students get knowledge firsthand regarding above related issues and can implement those to their assigned projects. Organizing workshops between different local and regional schools and student exchange programs can give students opportunities to share their ideas and work on different contexts.

5.5 User's Need vs. social and Environmental Awareness

Projects in real life situations help students to understand the importance of user's need. Architect professionals should try to satisfy the need of the user, the one who is actually going to use those buildings. The buildings should satisfy the users more than the architects themselves. This makes architecture different from art where the artist can paint and draw first of all to satisfy himself/herself.

5.6 Linkage between Theory and Sessional Courses

There is a need to develop more theoretical base to deal with architectural problems and to solve problems logically. The dire need to ask more questions than answers is indispensable. Students must be prepared methodically to take decisions with logic and should have philosophical understanding in concept formulation and carry out the project following a systematic procedure. At the end, the student would be able to answer most of project related decision-making. It should be remembered that the variety and complexity of the design problems has no limitation. It is difficult to teach students all these varieties of problems within a limited time period. If the student can gain confidence dealing with each problem in order, he/she would be capable of dealing with any new project with confidence. Developing personality and confidence along with skill should be the focus of architectural education. Care should be given to make theoretical courses understandable, interesting and related to architecture. A constant review of theory courses is essential to establish a direct link between theory, design exercise and practice. The curriculum of architectural education needs regular updating to meet present need and future demand.

5.7 Organizing Seminars and Workshops

Organizing seminars and workshops can play an important role in architectural education. Students get more interest in outside the classroom teaching and it also strengthens in-house input. A variety of experiences can be shared through those seminars. It was observed that schools have tried to organize seminars, slide shows of different sorts over the years that benefited students a lot. Workshops can create enthusiasm among the students. Only thing is that, these are not regularly organized in different public and private universities. The lack of financial resources and available expertise in different areas of specialties are the two main reasons for the above inadequacies.

5.8 Creating Information Data Base

In general students face the common problem of finding information relevant to their design. They mostly rely on published material based on western standard. Due to cost and time involvement individual students cannot produce their own database for projects. They rely mostly on published magazines and books for their reference. They aspire to achieve the look of western architecture through the use of imported building materials and finishes. The major question remains who will take the responsibility to prepare those information base, which will finance and also the work force that will dedicate their time. The department of architecture can play an important role in this regard. It is interesting to note that every year the students are gathering huge information through field survey of different urban issues to prepare their program or get acquainted with the project that they are assigned to do. Along with this research work undertaken from universities can provide database for use by the professionals. These could be a good source of information if gathered in a systematic way and in an authentic form. Sharing of information is also important that can save time and money at the same time. Due to technological advancement, today it is much easier to share and transfer information from one place to another. Use of inter-net to share information and distant learning method are not new in the western universities. Attempts could be made to explore the possibilities of using present day's technology and give a better scope for our future generation of architects in the region.

6. Conclusion

In order to bring a change to accommodate future need and demand of architectural profession, an analysis of the existing situation, problems and deficiencies in architectural education in Bangladesh need to be addressed. Searching for roots of our deficiencies and trend of architectural education would provide a base on which to develop and update the present curriculum and method of teaching. An integrated approach taking in-puts from national and regional level is searched for to attain a better future for architectural education in Bangladesh.

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- Stanford University (STU)
- American International University Bangladesh (AIUB)

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Appendix: 1

	BUET	KU	AUST	UAP	BRAC	SUB	NSU	STU	AIUB
Year of establishment	1961	1991	1995	1997	2001	2004	2004	2005	2006
Total Credit	190	200	191.5	198	199	190	171.5	175	178.5
Total Year of study	5	5	5	5	5	5	5	5	5
No.of Sem/term/level	10	10	10	10	15	15	15	15	10
No. of intake/ year	2	2	2	2	3	3	3	3	2
No.of Full time teach	35	17	24	14	12	8	10	15	15
No.of Part time teach	3	2	6	18	22	16	10	7	4
Total No. of students	300	200	352	220	195	250	225	250	320
Intake of student/yr	50	35	100	50	60	56	45	60	80
Sessionals									
Design Studio (Cr. Hr)	82.5	76.5	76.5	81	93	79.5	64.5	79.5	65.5
Design St.(contact hr)	123	153	153	120	135			159	117
Graphics (credit hr.)	6	6	6	6	4.5	6	6	6	6
Graphics (contact hr)	12	12	12	12	9			12 hr	12
Working Dwg.(Credit)	3	3	4.5	3	3	6	3	9	3
Working Dwg.(Con.hr)	6	6	9	6	6	12		18	6
Computer (credit hr)	3	3	4.5	6.5	4.5	6	3	4.5	1.5
Computer (contact hr)	6	6	9	10	9			9	3
Field Study (credit hr)		18	3						
Field Study (cont. hr)		36	6						
Other Sessional (Cr)	10.5	18	7.5	13	7	11.5	2	13.5	11
Other Sessional (Con)		36			14			27	21
Theory Courses									
Design Theory	4	9	6			3	4.5	6	* 4+2
Language (English)	2		2	6	3.5	6	6	6+1.5	6
History/Art & Arch.	10+2	17	8	12	12	15	11	18	12
Climate & Design	4+2	4	8+2	4+2	6	3	9	3	4+2
Building & Finish Mat.	10+2	4	10	4	6	3	6	6	4
Planning	2+4	4	8	2+4	4		3	3	2+2
Arts Subjects	8+10	12	14	4+4	10	9	6	12	13+2
Science	7	8	6	7	6		6	6	6
Math, Structure	14	12	13	14	12	9	9	9	10+2
Special Courses	6+20	12+2	10	12+4+6	12	6	3.5		8+6
Professional Pract.	2	2	2	1	3	1.5			2
Practical Training	non credit			non credit			non-credit		NC
Optional Courses	1/sem					7.5	15	33	
Elective courses							12		

Note: * 4+2 is compulsory theory 4 credit hour + 2 credit hour from optional courses of the subject (in this case Design Theory)