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Quality in Higher Education: An Empirical Investigation

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ABSTRACT: *Higher education has a pervasive impact on the entire education system. However, to meet society's expectations of higher education, the question of quality becomes crucial. It cannot be overlooked.*

Quality depends on teaching methods and the institutional commitment to create an environment for learning. In addition to teachers, students need physical, social, cultural, and psychological security. Sometimes forgotten is that higher education students are adults. Teaching adults requires adult treatment. This paper is a case study of a leading non-government university in Bangladesh. It assesses the university's various aspects of quality assessment via a survey of opinion among faculty, students and alumni.

KEYWORDS: *Education, teaching, learning, learning environment, quality assessment, University*

Introduction

The need for quality in education in schools and colleges cannot be ignored. However, analysts have defined the concept in many ways. Authors have defined quality as 'elusive', 'slippery & value-laden' (Harvey and Green 1993). Scott (1994) asserts "no authoritative definition of quality in higher education is possible". Westerheijden (1999) stated that the literature on higher education lacks a theoretical framework. "In the last resort, quality is a philosophical concept," concludes Green (1994). Confusion is also created by inter-mixing words like quality and standard. Quality can be read as the process used in delivering education to students, while standards are measures of student learning outcomes. Educational process is conditioned by a set standard of higher education.

Quality has many dimensions (EAU Case Studies 2007). Different stakeholders in a higher educational institution have different perspectives. For faculty and students, the priority may be the process of education. However, the priority of the employers of graduating students may be the standards of higher education institutions. Observations on 'fitness for purpose' or 'value for money' frequently appear in the discussion of quality in higher educational institutions. However, none of these terms has a solid theoretical foundation. Pragmatic approaches to measuring quality have a comparative nature, using audits and accreditation assessments.

Quality in Higher Education

The premise of Knowles (1975, 1984a) is that adults are mature self-focused learners who can take responsibility for making learning decisions. Knowles conceives adult learners as having the following characteristics: (1) unlike children, the reason for learning needs to be clear; (2) adults learn more effectively through experience; (3) adults learn more in problem-solving mode; and (4) relevance of the topic to the immediate need is of prime importance. His term 'andragogy' emphasizes the educational process more than the content when teaching adults. In this approach, the faculty move away from the classical role of lecturer or evaluator and take on the role of a facilitator or learning manager in course delivery.

Following are some of Knowles's (1984b) principles of adult learning:

1. Consultative process in the design of the subject of study, method of delivery and grading contribute to better learning.
2. The process of learning activities moves away from theory to practice.
3. Relevance to job or life is of prime importance.
4. Content of the course has less attraction to adult learners; they are more interested in learning through problem-solving.

Miyan (2011) has emphasized the importance of quality of education and social accountability in the context of Bangladesh, a low-income country. Assessing quality of higher education is not easy, and the rising demand for post-secondary education has

created an opening unfortunately for low-quality institutions. They in turn lower the credibility of all Bangladesh higher education institutions. Earlier, entry to higher education was very restricted and maintenance of reasonable quality was not a major problem. Today, a dramatic increase has taken place in the number of universities in the country and the problem of maintaining quality looms as a much more significant problem.

In particular, the shift from “class to mass” in rural areas presents many quality problems. Rural schools and colleges rarely have modern teaching and learning aids; they have few lab facilities. Students nurtured in these circumstances can hardly be expected to flourish. Quality higher education institutions need to offer special remedial training to make up for early learning gaps.

Higher Education in Bangladesh

Until the early 1990s, higher education was entirely in the public sector. Government universities (GUs) had all the elements of a good university in terms of structures and systems. However, faculty and student politics, campus indiscipline, session jams, insufficient seats, outdated curricula and like issues were pervasive, which led to exodus of good faculty and encouraged financially solvent families to send their children to foreign universities.

This academic environment induced some leading academics, philanthropists and social thinkers in the late 1980s to explore alternative modes of higher education. Ultimately, this led to breaking the public sec-

tor monopoly on delivering higher education, by enacting the Non-Government University Act 1992.

Presently, there are 37 government universities (GUs) and over 80 non-government universities (NGUs) in Bangladesh. Of the GUs, five were established before the 1971 liberation of Bangladesh. All the NGUs have been established after 1991. As of 2012, the total number of students in the GUs was around 197,000 (leaving aside students in the affiliated colleges of National University and Open University), while the number of students in NGUs was around 315,000. This might be indicative of the relative capacity, public confidence and quality of NGUs relative to GUs.

Quality assurance has been a big challenge for the GUs due to campus politics. As more NGUs are being established and are delivering higher education to more students, NGU quality assurance has also come into question.

Methodology

The empirical investigation reported in this article has been carried out on the quality of a leading non-government university, namely IUBAT—International University of Business Agriculture and Technology, the pioneer among non-government universities in Bangladesh. It started operation in 1991 – and has operated continuously since 1991 – by sharing a charter with a foreign university; it received its own charter in 1993. IUBAT has students and/or graduates from 475 out of 491 *upazillas* of Bangladesh. Students from 134 *Upazillas* have required financial assistance, which indicates students come from families

with a fairly wide range of income. The university has fully equipped facilities for all its academic programs and presently has around 7,500 students in the Master's, Bachelor's and diploma programs.

This is not a survey of quality in all NGUs. It is a case study in the potential for good quality in a leading NGU. IUBAT is expected to have gained experience in both teaching and research. Another reason for selecting IUBAT is ease of access for collecting information for the study as both the authors belong to the faculty of the university.

In this investigation, we sought feedback from students, alumni and teachers using structured questionnaires. Separate questionnaires were used for each of the three groups. The questions were both open- and closed-ended. Additional information has been collected through review of publications, papers, and documents available in the IUBAT offices and library. We provide some detail on the three samples:

- i. **Faculty:** The study included 30 (12.5% of the total) selected through random sampling. The study sample did not include any semester-based or visiting faculty members, who constitute a very small proportion of the total faculty.
- ii. **Students:** 60 students were selected by cluster sampling. For clustering purposes we selected the time slot with the maximum number of scheduled classes. From the cluster of classes, we selected 30 classes representing junior, sophomore and senior students, covering all programs of the university. We requested that instructors of the selected classes select two

students who in turn would complete the student questionnaire.

- iii. **Alumni:** The study covered 30 selected through random sampling. From an updated list of numbered IUBAT graduates we used a random number table to select.

Secondary information has been collected through a review of documents available, through the IUBAT library and via discussion with administrators. Information has been collected on the syllabus, faculty, course outlines, class monitoring, course instruction, student attendance in class, teaching methods, student service, seminar and workshop, intellectual competition, research and development, and facilities available for delivering quality education.

Description of Quality Assurance Aspects of IUBAT

In this section, we discuss aspects of IUBAT administration relevant to quality assurance:

- i. **Syllabus:** The IUBAT syllabi are constructed after consulting syllabi of different local and foreign universities. They are modified for the Bangladesh context. Course curricula have been standardized and are now recognized by other universities. Every four to five years, an overall curriculum review takes place. Every semester faculty review outlines of each course they teach. IUBAT has credit transfer agreements with several universities.
- ii. **Faculty:** Teachers are selected by assessing their academic degrees and also by how well they can deliver their subject

matter in a demonstration lecture. Faculty selection is an elaborate process involving preliminary sorting of applications, individual interviews, assessment reports by subject experts and administrators, English language test, subject matter test, and information technology test. IUBAT promotes faculty development by, for example, encouragement to participate in local, national and international training, seminars, workshops and conferences. IUBAT bears the cost for participation in such activities within the country.

- iii. **Course Outline:** The faculty member assigned to a course prepares a course outline, which is distributed to students on the first day of class. Outlines are preserved in the university library for future reference. Outlines allow students and administrators to assess the teaching material to be covered during the semester. Both faculty coordinators and the vice-chancellor review outlines. IUBAT has a generous budget for library procurement of required teaching materials.
- iv. **Class Monitoring:** Each class is physically monitored to assure it takes place as scheduled and on time. Weekly, the Registrar prepares the statistics of classes held and those to be made up, if any. Missed classes are made up either through make-up lectures or by advance classes used as make-ups. The monthly class monitoring report is presented in the monthly meeting of the Academic Council.
- v. **Students' Attendance:** If a student is absent, the instructor reports this to the registry and electronically sends an absentee report for the student. The registry office copies the report, keeps it in the student's file, and emails it to the student, to the student guardian, and to the program coordinator. This helps regularize student attendance. IUBAT regulations enable teachers to allocate 5 – 10 percentage points in grading for class attendance. If a student remains absent for more than three days in a course without a valid justification, the instructor may assign a failing grade in the course. With these academic regulations, the university maintains an average 90-95% attendance of students.
- vi. **Course Instruction Survey (CIS):** Students complete a CIS on finishing each course. The CIS allows students to evaluate the course material, teaching efficiency and the extent to which the student considers he or she benefited from the course. Teachers are informed about the students' evaluation results. The CIS is a standard form and the data are processed through software. This process is extremely helpful in designing/redesigning courses and improving the teaching efficiency of instructors.
- vii. **Methods of Curriculum Delivery:** English is the medium of teaching and communication in all IUBAT programs, communications and activities. IUBAT programs emphasize task-based and participative methods of instruction as well as use of modern teaching aids as supplement the classical instruction methods. The program emphasizes close interaction between teachers and students in formal

and informal situations. At admission, nearly all freshmen have limited English speaking ability. By the time they graduate (at the time of Practicum Defence examination), the scenario is reversed: 49% of students have moderate-to-good spoken English; 50% demonstrate excellent spoken English; only 1% perform poorly.

- viii. **Student Service:** For career development as well as handling problems, students are offered special courses with credit. The Counseling and Guidance Centre helps students, for example those with difficulty in organizing practicum and job placement. (However, nearly all students get their practicum and job placement by their own efforts.)
- ix. **Seminars and Workshops:** Seminars, workshops and conferences are regularly organized on national and international trends in teaching and learning processes.
- x. **Intellectual Competitions and on-the-job opportunities:** Simple competitions among students encourage academic improvement in a way that students enjoy. There is also some potential for on-the-job experience, which also offers some financial benefit to students.
- xi. **Research and Development:** At present, IUBAT undertakes limited research. However, IUBAT is encouraging more research activity: participation in national and international conferences, seminars, workshops; publication of working papers and articles. IUBAT has recently introduced a reward system for different categories of publication. While the library is adequate

for student needs, many faculty members have requested expanded library facilities. There is an ongoing demand for greater online computer access. IUBAT has organized campus-wide WiFi access.

- xii. **The campus site:** IUBAT is located in Sector 10, Uttara Model Town, Dhaka on a 5.5 acre site near the international airport. The campus lies on the bank of the Turag River with a panoramic view. It is an excellent location for academic study. The site has enough space to enable students to engage in outdoor sports on the campus site and protects classrooms from street noise.
- xiii. **Multicultural student body:** IUBAT has attempted to draw international students from beyond Bangladesh. This is difficult to achieve, but there has been success in particular departments.
- xiv. **Accessibility and Affordability:** IUBAT has a long-term vision of graduating at least one student from each village/ward/mohall of Bangladesh. This goal is a symbol of IUBAT's commitment to quality education throughout Bangladesh (Miyan 2015). IUBAT has provision for supplementing the family resources of students through scholarships, bursaries, fee waivers, deferred payment schemes, campus jobs, student loans and the like. IUBAT has established an educational cooperative (Multipurpose Cooperative Society Ltd. (IMCSL). One of its objectives is to mobilize funds for educational loans and scholarships for IMCSL members and their dependents.

Findings of the Faculty Survey:

The findings of the faculty survey are reported below:

Class Monitoring System

All faculty members agreed that the present monitoring system is effective in assuring attendance.

Course Outline for Organizing Teaching

In assessing the course outline protocol, 63.3% found it useful in organizing teaching; 33.3% stated that it is effective; and 3.3% stated that it is not relevant in organizing teaching.

Course Instruction Survey (CIS) for Feedback to Faculty

Students are required to carry out a CIS on completion of a course in a semester. 73.3% of faculty agreed that the CIS is a useful mechanism to gather feedback from students; 23.3% disagreed with the concept of student feedback, and 3.3% stated that they are not sure. The faculty suggested several improvements: (i) students should be given guidelines for completing the CIS; (ii) the CIS questionnaire should use plain, simple wording; (iv) some additional course attributes may be incorporated in the CIS questionnaire in line with evaluations conducted by other universities.

Learning Assessment Process

In assessing student learning, faculty choose from many options (e.g., student presentations, quizzes, assignments, project work, exercises,

term papers, case analyses). 93.3% are satisfied with their learning assessment choices, while 3.3% stated that they are not satisfied, and 3.3% stated that they are not sure.

Faculty suggested several potential improvements in learning assessment: (i) classes should be more participatory, (ii) at least 10 minutes of class time should be spent on feedback to improve spoken English capability of students, (iii) extra learning sessions should be provided for weaker students; (iv) quiz systems should avoid using pen and paper and chalk board, (v) increased use of laboratory facilities for performing experiments, and (vi) introduction of open book examination.

Fair Examination in IUBAT

Exam cheating is unfortunately a widespread feature in Bangladesh universities. 80% of the faculty reported that the examination system in IUBAT is fair, while 6.7% think it doubtful; the remaining 13.3% are not sure.

Quality of Teaching Faculty

54% of the faculty are satisfied with the quality of their colleagues at IUBAT; 12% are not satisfied, and 34% refrained from making any comment. As to the suggestions for improvement, the respondents observed that (i) faculty should be recruited on the basis of merit, depth of subject related knowledge, experience, expressiveness and self-motivation; (ii) there should be a recruitment committee for each appointment; (iii) but the time required in the faculty recruitment process should be shortened, and (iv) there should be a separate human resources section in the university.

Teaching Aids in Classroom

90% of the faculty stated that the teaching aids in classrooms are adequate while 7% stated these to be not adequate; 3% did not respond. All classrooms at IUBAT are equipped with internet access, multimedia projectors, sound system, and white board with marker pens.

Library Resources of IUBAT

50% of the faculty stated that library resources are adequate, while 40% stated not adequate; 10% did not make any comment. Suggestions for improvement of library facility included (i) more space for reading materials and CDs; (ii) expansion of e-library access, and (iii) procurement of books through consultation with the concerned course instructor.

Registry Service

16.7% of the faculty stated that registry service is adequate while 63.3% stated that it is inadequate, and 20% did not make any comment.

Faculty Consultation Service to Students

Each course instructor is required to provide consultation hours every week for students in the course. 56% of faculty stated that the consultation service faculty provide is adequate, while 13.3% said not adequate; 30% are not sure. Suggested improvements included (i) desirability of friendly behavior for learning; (ii) new students are too dependent on the Program Coordinator and they should be encouraged to seek advice from individual faculty, and (iii) students should be encouraged to consult with their class instructors.

Overall Quality Standard

On the question of overall quality, 64% of the faculty stated that IUBAT fulfils overall quality standards, while 36% disagreed. Some suggested that class size should be reduced.

Findings of the Student Survey:

Personal Study for each class Hour

To achieve quality education, students need to devote adequate hours to study. According to IUBAT regulations, students should back up every class hour by a minimum of three hours of personal study (Ref: IUBAT Bulletin). Most students are not meeting this expectation. 21% of the students reported undertaking backup personal study of less than one hour, 35% for one hour, and 44% for more than one hour.

Meeting deadline for submission of assignment/project

Assignments and project work are important in achieving learning goals. 84% of students submit project assignments on time; 16% fail to meet deadlines.

Perception on Dress and Behavior Code

The IUBAT mission calls for the "holistic development of the person" through the combination of academic and extra-academic activities, as well as personal development and grooming for a professional career. To encourage preparation for a professional career, IUBAT has adopted a dress code guideline for both male and female students. 69% of students found

the dress code very useful; 28% classified it as useful, and 3% did not perceive it as important in career development. On the question of following the dress code in the university, 100% said that they did so.

Fair Examination Process

74% of students expressed the view that the examination system prevailing is fair; 8% view it as unfair, and the remaining 18% refrained from making any comments. Asked whether they received exam results and scripts on time (within a week of writing the exam), 52% reported that they did; 44% reported this was not always the case, and 4% said they did not receive results on time.

Practice of English as a Medium of Instruction

IUBAT policy requires that every graduate demonstrate competence in reading, writing and speaking in English in academic and other contexts. To meet this requirement each student is required to pass with a minimum C grade three sequential courses intended to improve English writing and reading ability. All non-engineering students are required to pass a fourth class, public speaking in English.

Asked whether they use English as a medium of conversation, 90% replied affirmatively, 4% negatively, and 3% did not express any view. On the question of how they practise English, 66% reported that they practise through talking with teachers, friends, classmates; they make class presentations, attend debate competitions, undertake class room practice, group study, and watch English-language movies. 28% did not make any comment, and 6% reported difficulty in practising

English. The challenges mentioned include (i) difficulty of keeping up a conversation in English with friends; (ii) limited number of friends available with whom to practise English; (iii) feeling shy due to poor speaking ability in English, and (iv) a de-motivational situation created by teachers who speak English in class but speak Bangla outside the class room.

Class Attendance

IUBAT policy requires students to attend all classes and laboratories. A maximum of three absences in a course is allowed with a valid reason. Unexcused absences lead to reduced course grade, suspension, or dismissal from the course. The survey on regular attendance suggests that 95% of students attend classes regularly, while 5% fail to do so. Two students cited personal engagements and traffic jams as reasons for poor attendance.

Use of Library Facilities by Students

85% of students said that they do visit the library (number of visits varies from a maximum of every day to a minimum of 10 days a month); however, 15% of students do not visit the library at all.

Can students follow the instructor's lecture?

100% of the students reported that they can follow the lectures and discussions in class. However, students made many suggestions on how the instructor could make the class more interesting (see Table 1).

Participation in Sports

IUBAT has a playing ground available for students to play games like football and cricket. There is also an indoor sports room where students play table tennis, carom board, etc. Sports competitions are organized regularly. 55% of the students reported that they do participate in games; 45% do not participate. The students who do not participate in games or sports reported the following reasons for inactivity (see Table 2):

Overall Quality Assessment by Students

On the issue of overall quality at IUBAT, 69% of the students reported it as good; 28% reported negatively; 3% abstained from making any comment.

Findings of the Alumni Survey

Unfortunately, only 28 alumni responses were found to be valid. The limited results are presented below:

What was the most useful learning experience at IUBAT?

This question elicited a mixed response. For the overwhelming majority, nearly 86%, the learning of English was the most useful learning experience at IUBAT. This was followed by adapting to a dress code, mentioned by 32%, and valuing the teaching methods, mentioned by 14%. Other comments included commitment of teachers and library use.

Contribution to Career Development

The alumni were asked to assess the contribution of IUBAT to their career development. Everyone responded positively on this question. 70% found their IUBAT experience “most effective”, while 30% found it to be “moderately effective” to their career development.

Assessment of Learning Experience

In assessing the IUBAT learning experience, all responded positively. 37% found the learning situation excellent, while 63% found it satisfactory.

Utility of IUBAT Dress and Behavior Code in practical Life

93% found the dress code “very effective” in their professional life; the remaining 7% did not find it useful.

Assessment of Quality Standard

The alumni were asked their assessment of the quality standard in their respective IUBAT educational program. Most responded positively to this question: 67% reported that IUBAT maintains good standards, while 33% felt otherwise.

Overall quality standard Assessment by Different Stakeholders

In order to depict the overall quality of IUBAT as a university, a common question was asked to the stakeholders (faculty, students and alumni). The overall stakeholder assessment of quality is quite high with variations among the three groups (see Figure 1.)

Conclusion

Quality assessment is crucial to the development of higher education in any country. Surveys are not the only means to measure quality, but they are a valuable tool. The assessment conducted at IUBAT indicates considerable success in providing quality educational and related services. There is obviously more to be done. Striving to achieve quality is a continu-

ous activity and requires collective efforts by all stakeholders. Creation of a “knowledge culture” is a big challenge for all universities more so in a developing society. The competition among these universities for students, particularly among the NGUs, forces them to be market-relevant. The value of this case study is to illustrate the range of policies required to achieve reasonable quality. We recommend that quality studies be carried out more widely among Bangladesh universities and robust quality assessment measures become widespread.

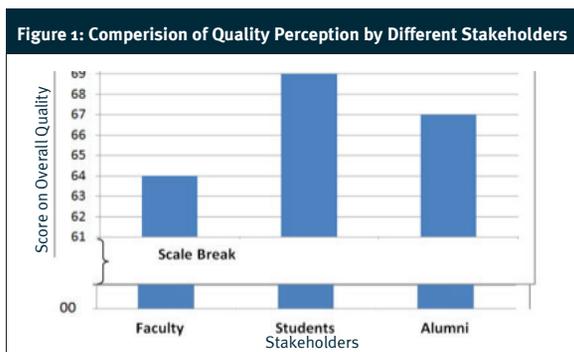
Table 1: Students' Remarks on Delivery Improvement

Suggestion to instructor	# of respondents
Provide an option for discussion on an issue	2
Be friendly in demeanor	8
Explain ideas directly to the class rather than read from the text or multimedia slides	1
Provide more practical examples in the class	9
Do not speak quickly	1
Maintain fewer than 50 students in the class	1

N=25

Table 2: Reasons reported by students for Low Participation in Games and Sports

Reason	No of Students
Too busy with study	19
No separate sports facility for women	1
Not interested in games/sports	7
Do not get any scope to play	5
Lost interest due to failure to win prizes in earlier events	2



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