ROLE AND IMPACT OF ACCREDITATION ON INDIAN HIGHER EDUCATION

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ABSTRACT

NBA accreditation is helping to bring in systemic transformation of the technical education sector in sync with the rapid economic and technological changes occurring both at national and international level. Over 85% of engineering graduates today are the product of privately owned and affiliated with state universities. Nearly 60% of engineering graduates and post graduates come from only four states, Tamilnadu, Andhrapradesh, Karnataka and Maharasra. In this paper, case studies of five different Indian Institutions covering Andhra Pradesh, Tamilnadu, Karnataka and Maharasra were studied during last decade and presented. All these institutions have gone through the NBA accreditation process under various evaluation criterion. Few parameters that were consistent and lead to Quality improvement were highlighted. Also the opportunities and challenges of accreditation were highlighted.

KEYWORDS: Accreditation, Higher Education

INTRODUCTION

NBA-I accreditation criterion started with importance to Organisation Governance, Teaching-Learning process, Faculty and facilities available in the institution, which is apt for the beginning of accreditation process. As the time progressed, changes were done in the criterion with emphasis on many aspects. Though there is no single set of descriptors to compare, Fig. 1 was showing the comparison across the three NBA criterions with few assumptions. Over 85% of engineering graduates today are the product of privately owned and affiliated with state universities. Nearly 60% of engineering graduates and post graduates come from only four states, Tamilnadu, Andhrapradesh, Karnataka and Maharasra [3]. In this article, Only Privately owned Engineering education institutions were taken as the basis for parameter studies and recommendations.

METHODOLOGY & OBSERVATIONS

In this paper, three NBA criterion were analysed and recommendations were proposed. Five case studies of different Indian Institutions covering Andhra Pradesh, Tamilnadu, Karnataka and Maharasra were studied during last decade and presented. All these institutions have gone through the NBA accreditation process under various evaluation criterion. The affiliated colleges have no academic autonomy since all the
academic matters related to student admission, curricula, and examinations are decided and dictated by the affiliating state universities, often without their active involvement in decision making bodies setup by the universities. Parameters such as governance, Faculty, Student Quality, facilities and teaching-learning process were analysed and discussed.

**ANALYSIS & RECOMMENDATIONS**

From figure 1, it is evident that the weightage for Organisation Governance was highest at the beginning, which is apt and as the time progressed there was remarkable improvement in this aspect and hence reduced weightage at later criterion. It was observed that the governance is always a qualitative evaluation by the NBA team. During the NBA-III, many descriptors such as faculty, student quality and student performance were quantified and similar mechanism was proposed for the Organisation governance also.

![Figure 1. Comparison of three criterion](image)

**BUDGET ALLOCATION, UTILIZATION AND PUBLIC ACCOUNTING**

As the institutions should utilize the fee collected from students in better governance of the institution, Scoring should be given based on the percentage spent on parameters such as Salaries, Library, Laboratory Facilities, continuous education and infrastructure. To demonstrate the case study, Fig 2 shows the % Expenditure of staff salaries out of the total tuition fee collected during the respective academic year. As observed in Case-2, the percentage of the tuition fee spent on salaries will come down and helps the
organization. This is due to industrial interaction that resulted in revenue generation in addition to the practical exposure to students and solutions to industrial problems.

Fig 2. Percentage expenditure of tuition fee (as staff salaries)

![Bar Chart]

Though this is not hard and fast to follow, An illustrative model was mentioned in the pie chart

![Pie Chart]

Fig. 3 Illustrative Pie Chart for Budget Allocation
Also additional score should be given for Grants / external research and consultancy services with a sealing on maximum score. Another improvement area is the governing body and execution committee’s qualifications and continuity as the evaluation parameters. Governing bodies are improved but members appointment, as adhoc for Universities and longer retention of key members is still an issue.

Teaching Learning process was present from the beginning and was elaborated during the subsequent criterion and also the weightage was split into various parameters and should be continued as it is.

**ENGINEERING PROGRAM CURRICULUM**

Engineering curriculum has been included in NBA-III, but was evaluation is still qualitative. Average split of curriculum for the various states was described in Fig. 4. As can be seen from the graph, there is variations in the curriculum and non uniformity. Gautham Biswas et.al., studied this aspect extensively and recommended the number of courses under different categories in a model curriculum as shown in Table 1.

**Figure 4. Percentage split of courses for various states**
Table 1. Number of suggested courses in different categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Courses</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Core Lab</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Eng Science Compulsory</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Eng Science Optional</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Communication skills, humanities and social sciences</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Engineering Practice</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Open Elective</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Department or program specific</td>
<td>18</td>
<td>45</td>
</tr>
</tbody>
</table>

| Total                                                           | 40                | 100       |

There should be a common directive from NBA so that all educational institutions will align towards a consistent curriculum. Quantitative evaluation should be introduced to meet the above-mentioned split of curriculum.

**CONTINUOUS IMPROVEMENT**

Continuous Improvement which was introduced in NBA-II and the latest criterion NBA-III has the parameters such as improvement in student success index, academic performance, student-teacher ratio, faculty qualifications, publications, consultancy in well quantified way. However, Continuous education, new facilities were present but the evaluation was performed on qualitative information. Total expenditure (infrastructure, Library, Laboratory equipment and consumables, Salaries and Travel) of three colleges was shown in Figure 5. A continuous improvement index should be included in NBA evaluation in order to improve the useful expenditure.
CONCLUSIONS

Various parameters such as curriculum content, budget allocation and utilization and continuous improvement parameters were analyzed with respect to the three NBA criterion and recommendations were proposed for consideration for future NBA Accreditation criterion preparation.

There is a need to further strengthen the quality assurance and accreditation at both national and international levels. Accreditation process will help the professionalization of Indian engineering education. Accreditation agencies should work with educational institutions and facilitate them in quality improvement.

REFERENCES


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