An Increasing Number of Engineering Colleges in the State of Pudhucherry: A Boon or a Curse

S. Ishwariya, J. Sengathir

Abstract
Engineering education is a methodology through which the principles and knowledge for carrying out proficient actions of engineering. The Engineering education can enhance the productive capability of the human capital by creating assets in them in the form of knowledge. This education has to delivered with quality so that innovative ideas emerging from the Engineering graduates could increase the economic growth of the country. But, the increase in the number of Engineering colleges in a small union territory like Pudhucherry can decrease the quality of engineering education. Even though, it is a boon for people of Pondicherry. This study throws light on the various recommendations that could increase the quality of Engineering education in the state of Pudhucherry which was evolved from the survey taken from four classes of people namely Illiterate parents, Literate parents, Teaching professionals and Engineering students.

Keywords
Engineering Education, Human Skill, Innovation, Likert Scale

I. Introduction
In India, Most of the students desire joining Engineering courses after their higher secondary Education. There arises a huge demand for getting seats in the reputed institutions. In the past, the students spend lot of money and time to prepare themselves for their entrance examinations, but only some of the student’s desire became true. This resulted in a boom of emerging engineering colleges. Most of the students got benefited by getting admission to engineering studies. The main crucial issue is the lack of quality engineers with minimum employability skills due to inadequate knowledge.

A. Pudhucherry
The Union territory of Pondicherry covers a total area of only 492 sq km with Pondicherry town and its villages covering 293 sq.km, Karaikal town and its villages covering 160 sq.km, Mahe and its villages covering 9 sq km and Yanam covering 30 sq.km. While Pondicherry, the head quarters of the union territory, lies 162 km south of Madras and 22 km north of Cuddalore, Karaikal is about 150 km south of Pondicherry and Yanam about 840 km north-east of Pondicherry on the Andhra Coast. Mahe lies almost parallel to Pondicherry 653 km away on the west coast. But, in such a small state, there are nearly 15 engineering colleges at present. Even though it is a boon for the students of pudhucherry, the employability skill present in them is not up to the standard.

II. Objective of the Study
The objective of the study mainly focuses
- To identify the literate people view on the increasing number of engineering colleges.
- To identify the illiterate people view on the increasing number of engineering colleges.
- To evaluate the quality of education provided to the students studying in the engineering colleges of pudhucherry.
- To find out the students view on the level of infrastructure provided in the engineering colleges of pudhucherry, which includes both the physical and human resources.
- To establish the teaching professionals point of view about the growing number of engineering colleges in pudhucherry.

III. Literature Survey
Mr. Manish Sabharwal chairman, Team Lease services speaking at CII (2008) Global submit stated that ‘Education’, ‘Employability’ and ‘Employment’ are correlated with one another. According to National Knowledge Commission (2009) Report, English Language is the most important factor for accessing higher education, Employment Possibilities and Social Interaction.

IV. Research Methodology and Data collection
A survey was taken in the state of pudhucherry which covered different classes of people including literate parents, illiterate parents, students studying their higher secondary education, students pursuing engineering education and teaching professionals. The survey covered nearly a sample size of 1000 where 200 from each class.

A. Sample Design
Sample design is the method of selecting various parameters in a population from which the conclusions about the entire populations could be drawn.

1. Sampling Size
100 sample size

2. Sampling Techniques
In this study, the necessary data are collected through researcher has selected the simple by random sampling.

3. Primary Data
The primary data is the data collected directly from the women teachers working in the private schools of Pudhucherry.

4. Secondary Data
The secondary data is data collected indirectly from the data available from websites, Annual Reports, Journals and other company published sources etc.
5. The Questionnaire Scale

Likert scale was used for evaluating the responses for most of the questions in the questionnaire. If the respondents of the questionnaire strongly agreed to the statement, they are marked on the scale as ‘1’. To the contrary, if the respondent strongly disagree with the statement then they marked as ‘5’. A response of 3 indicated the respondent was neutral on their agreement/disagreement with the proposed statement. For purposes of analysis, we have lumped together the “1s” with the “2s” and the “4s” with the “5s”. The reader is also reminded that some of the proposed questions (statements) were written such that an answer of “5-strongly disagree” was a good response. We have reversed the results from these statements to ensure they are readily comparable to statements that were written in the affirmative to maintain a consistent presentation of our findings. This change is reflected in the Tables. The “lumping” of scores together is an approach the IRS has used to evaluate scores received during the Employee Satisfaction Survey. We hope the consistent use of this approach will make it easier to understand the results from our customer satisfaction survey and enhance their usefulness.

Table 1: Respondents view about increase in Engineering Colleges of Pudhucherry.

<table>
<thead>
<tr>
<th>RATING LIKERT SCALE</th>
<th>GOOD</th>
<th>AVERAGE</th>
<th>POOR</th>
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<tbody>
<tr>
<td>1-Good</td>
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<tr>
<td>2.3 AND 4 –AVERAGE</td>
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<td></td>
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<tr>
<td>5-POOR</td>
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MONTH AND YEAR OF SURVEY TAKEN | GOOD | AVERAGE | POOR |
NOVEMBER 2010 | 65 | 20 | 15 |
NOVEMBER 2011 | 56 | 24 | 20 |
NOVEMBER 2012 | 48 | 22 | 30 |

Fig. 1: Chart for Respondents View About Increase in Engineering Colleges of Pudhucherry

B. Survey Results

The results from the survey are summarized in the following Tables 2 and 3. We created a measure equal to the difference between the aggregate number of “good” and “bad” scores. This measure is shown in the right columns of Tables 2 and 3, with results from the current survey contrasted to the results from the survey conducted in the month of November 2011 and November 2010 surveys. The lower the difference the greater the perceived dissatisfaction expressed by our sample groups. The “difference” is a useful measure in that it allows one to quickly identify those areas where ITG has pronounced differences in customer satisfaction. Table 2 reflects the response rates in order of the questions (statements) asked on the questionnaire.

C. Recommendations

The government of Pondicherry, all India council for technical education and Pondicherry University should take care of the following parameters that are relevant for providing excellent engineering education by its affiliated engineering colleges, they are:
1. Monitoring the infrastructure of the engineering colleges.
2. Monitoring the faculty to the student’s ratio.
3. Monitoring the qualification of the faculties.

V. Limitations

1. The Questionnaire used was lengthy hence the participants were less interested to contribute to the survey.
2. The sample that is taken for the survey is not large, so the full objective of the study may not be met.

VI. Conclusion

The above survey highlights the various attributes that an engineering college must possess. It also depicts that the recommendations provided by the study is followed, the increasing number of engineering colleges can be a boon and if not it will become curse, which will be a hurdle to the economic development of the country due to poor human skill.

References

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