

Assessing Quality of Education in Institutes of Higher Learning in Australia

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Abstract: *In present competitive academic world, accessibility to qualitative higher education has become a significant factor both for improving skills and employment. In spite of having enormous number of higher education institutes with good educational infrastructure, it has failed to provide quality in its approach. In such scenario, the study will attempt to focus on quality and quality gaps by concentrating upon student's satisfaction with the university. The study will be based upon random sample survey of post-graduate students of different universities and then percentage and factor analysis will be applied to analyze the results and draw interpretations.*

Keywords: Quality of Education, Percentage Analysis, Factor Analysis.

1. Introduction

Education acts as a catalyst in the process of skill formation, as the educational choice of today's young generation determines the skill portfolio of tomorrow's labor force and thus also the future production possibility of the country. [1] Endogenous growth theory postulates that human capital accumulation is a driver of economic growth which has made governments of different nations to make huge investments in education sector. But here, skill formation, as an outcome of education, play an importunate role in sustained economic growth because a high quality education enables people to perform effectively in the workplace by contributing to innovation and generation of new values for organization. In context of higher education, public spending is a crucial determinant in most countries presently which is a major factor responsible for lack of qualitative approach in higher education institutes. Australian business depends entirely upon highly talented, motivated and capable people who can contribute to innovation and can lift the productivity of organization in this global competitive and technological era. Problems like public spending upon higher education & research, sharp fall of international students, along with irrelevant learning outcomes are major obstacles confronting higher education of Australia. [2] Although, there exists tremendous expansion of institutes of higher learning at international level but still the quality become a major area of concern. Even the information technologies like Internet cannot become helpful without qualitative approach. In present competitive academic environment, where students have many options available to them, universities need to search for effective ways to retain attract and foster stronger relationship with students. Students have become 'Customers' as a result of competition and it has become important to get students feedback in terms of student satisfaction analysis. Furthermore, psychologists have found that student satisfaction helps to build self-confidence and that self-confidence helps students to develop useful skills, acquire knowledge and become more confident, in what may be described as a virtuous cycle. To ensure a productive labor force for business environment of Australia, it has to focus upon quality and quality gaps at tertiary level of education and driving out student's satisfaction is one way to do so. According to Oliver & DeSarbo (1989), student satisfaction

refers to the favorability of a student's subjective evaluations of the various outcomes and experiences associated with education. [3]

2. Objectives

The various objective of this study are following:

- To study the quality and quality gaps in higher learning institutes of Australia.
- To compare and contrast satisfaction level of students from two or more state universities.
- To know the student satisfaction level at tertiary level of education as students are the central theme of any government policy related to education.
- To study the numerous loopholes of the education system as a whole and to check the implementation of various policies related to education by the government.
- To outline certain suggestions for government so that educational skills and research could be further expanded by ensuring more spending and practical application in studies.
- To know whether students are employed after completing their education.

3. Review of Literature

Institutions of higher education are increasingly realizing that they are part of the service industry. Thus, they are emphasizing more upon student satisfaction as they face competitive pressures. Scholars like Athiyaman (1997) believe that student satisfaction has been related to recruitment, retention and academic success matched to the university's capabilities and to develop competences at the university that will better serve the needs of diverse student populations. [4] According to Bandura (1977) [5] and Schunk (1991) [6], learners use self-regulatory attributes to control their personal learning processes and self-efficiency influences choice and efforts. Past research of Bean and Bradley (1986) [7] states that student satisfaction predicts academic, personal and professional achievements which are the most desired by any organization. Borden (1995) [8] found that student satisfaction is related to the match between priorities of students and the campus environment. Savier (1996) [9] is of the view that university's product is

the sum of the student's academic, social, physical and spiritual experiences. Dembo & Eaton (2000) [10] believe that satisfied students seem to have an ability to encourage and motivate themselves, while unsatisfied have difficulty in developing self-motivation skills. Umbach and Porter (2002) [11] and Thomas and Galambos (2004) [12] focused on faculty and department roles in shaping students satisfaction. They concluded that department where faculty focuses on research; students report higher levels of satisfaction. The study of Graunke and Woosley (2005) [13] has shown that higher the level of student satisfaction, higher is the retention rate. Higher satisfaction leads to higher grade point averages and low dropout rates and vice-versa. As an extension of it, Suhre, Jansen & Harskamp (2007) [14] found that student satisfaction will not only lead to greater retention in the university but also to more productive academic careers for the retained students.

4. Database and Methodology

The choice the higher education is a discrete decision, consistent with a qualitative choice. In the context of present study, it will based on data collected from a random survey of Post graduate students from two or more universities under state's control of Australia for a particular time period. The choice of respondents will depend upon age, income, sex, occupation, religion, employment of respondents as well as on qualification, availability of infrastructural, course content and placement services of the campus. The variables could be selected as follows:

- X1: Sex of Respondent
- X2: Age of Respondent
- X3: Religion of Respondent
- X4: Regular classes in university
- X5: Quality of teaching
- X6: Quality of course
- X7: Extra-curricular activities like Extension lectures, workshops etc.
- X8: Relevance of Course in practical life
- X9: Employment
- X10: Skilled course
- X11: Satisfaction with infrastructural facilities
- X12: Satisfaction with policies of university related to education
- X13: Satisfaction with security at university
- X14: Satisfaction with placement services or job related services of university

Thereafter, factor analysis will be used to identify and isolate the variables, which will affect and cause variations in the satisfaction of students. [15] It is an interdependence technique in which all variables will simultaneously considered, each related to other. This analysis assumes that inter-correlations occur because a few basic properties (factors) are shared in common by the different variables in different degrees. In factor analysis, a given set of 'n' variables will groups into 'p' number than the set of original variables. Factors F1 and F2 are orthogonal i.e., variables within a group (factor) are generally of the same nature or close complementary with respect to the phenomenon under study where variables are independent. The methodology of factor analysis to be used is as follows:

$$\underline{X} = L \underline{F} + \underline{\mu}$$

Where, \underline{X} is the vectors of all the original variables

$$\underline{X}' = [\underline{X}_1, \underline{X}_2, \underline{X}_3, \underline{X}_4, \underline{X}_n]$$

\underline{F} is the vector of 'Factors' derived

$$\underline{F}' = [\underline{F}_1, \underline{F}_2, \underline{F}_3, \underline{F}_4, \dots, \underline{F}_n]$$

\underline{U} is the vector of error terms

$$\underline{U}' = [\underline{E}_1, \underline{E}_2, \underline{E}_3, \underline{E}_4, \dots, \underline{E}_n]$$

L is the Factor Loading Coefficient Matrix

$$L = \begin{pmatrix} a_{11} & a_{12} & \dots & a_{1p} \\ a_{21} & a_{22} & \dots & a_{2p} \\ a_{31} & a_{32} & \dots & a_{3p} \\ \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & a_{np} \end{pmatrix}$$

The coefficient (factor loading) a_{ij} belongs to the i th variable and j th factor which is similar to simple correlation coefficient and shows the extent to which variable X_i is associated with F_j factor. A salient loading is the one which is significantly high to assume that a relationship exists between the variable and the factor. In addition, it means that the relationship is high enough so that the variable can aid in interpreting the factor and vice versa. [16] The commodity for X_1 variable (c_{i2}) is the sum of the square of factor loadings of X_1 original variables under the derived p factor and is calculated as:

$$(c_i)^2 = (a_{i1})^2 + (a_{i2})^2 + (a_{i3})^2 + \dots + (a_{in})^2$$

The purpose of communalities in factor analysis is to show the extent to which the derived factor explains the i th variable. Derived communality value should generally be more than 70 percent so that it could be sure that each variable has been explained clearly. Thus the communality is that proportion of the variance of a variable which can be accounted for by the common factors. For example if, the communality is .75, the variance of the variable as reproduced from the only common factors be three-fourth of its observed variance [17]

5. Research Questions

- What policies a university and government should adopt in order to enhance the skills and retention rate of students at tertiary level of education?
- What kinds of problems are faced by students in grasping their education at higher level of their studies? It means to analyze, what they expect and what are they getting?
- Australian business firms finds lack of skilled manpower for which they have to import from abroad. Therefore, it is of urgent need to understand various loopholes in quality issue at higher education level. What kind of shortcomings universities faced in implementation of policies e.g., of public spending by government?
- Are the students getting employment after completing their studies or not?
- What are the various suggestions for the universities to improve more quality in education?
- What are the qualitative gaps in Australian State universities as these are very importunate so as to survive in this competitive academic world and to increase its retention rate.

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Author Profile



Neha Sharma received the Master's and Bachelor's degrees in Social Sciences (Honors School) from Guru Nanak Dev University, Amritsar, Punjab, in 2012 and 2010, respectively. During her studies, she was topper of university and had much leadership skills during her studies. Presently, she is an independent research scholar and working on different research papers.