Perception of Ktu

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Abstract- In this work the importance is given to understand the response of student and teachers about the introduction of new university KTU(Dr. A P J.Abdul Kalam Kerala Technological University). It is one of the most relevance topic ever to analyse the academic standards of students after implementing a new university. We know there are some inefficiency in the previous syllabus and the criteria which was followed. That is the reason why new university is introduced. So understanding what academic standard the new university proposing and whether it is worked well on the students of Kerala are necessary. This case study emphasizes on whether true goals of KTU is achieved through new regulation and to collect the student and teachers responses and suggestions. For that the hypothesis raised is the methods of ktu will increase the academic standards of KTU

***Index Terms*—KTU, Academic standard, questionnaire, hypothesis, chi-square testing .**

I.INTRODUCTION

APJ Abdul Kalam Technological University (initially called 'Kerala Technological University') is a university established by the government of Kerala. The objective of the University is to coordinate, supervise, regulate, guide and provide leadership in all aspects of technological and engineering education and research in Kerala State.

The university has its headquarters in Thiruvananthapuram and its jurisdictional authority extends to the whole of Kerala State. The university has been established both as a teaching and affiliation university. Engineering colleges may be affiliated as a regular college, a constituent college, an autonomous college, or as a college with academic autonomy.

The objectives of university are explained below. To give leadership to the technology related policy formulation and engineering planning for the state To improve the academic standards of the graduate, post graduate and research programs in engineering science, technology and management. To regulate the academic standards of all colleges affiliated to the University. To monitor, regulate and ensure that the academic standards of all institutions not affiliated to the University, but conducting engineering courses in the State, are in accordance with law and in accordance with such guidelines and orders issued by the University. To advance and disseminate learning and knowledge in engineering sciences and allied fields by fostering and promoting engineering research. To design new courses and curricula based on the advances in accordance with the norms, if any, laid down by the AICTE. To act as the nodal agency for linkages in the field of engineering sciences, technology and management with other national and international institution To promote interdisciplinary education and research in the field of engineering sciences, technology and management To promote acquisition of knowledge in a rapidly developing and changing society and to continually offer opportunities for upgrading knowledge To impart training with the use of modern communication media and technologies for the development of skills appropriate for a learning society in the context of innovations, research and discovery by establishing educational network related to engineering sciences.

II. RELATED WORKS

We have referenced some of the papers already done these types of projects. Those were very useful throughout our project. Some of the papers are explained in below papers.

Perception of Academic Self-Efficacy and Academic Hardiness in Taiwanese University Students[1]: This study aims to explore the relation between Taiwanese university students' academic hardiness (USAH) and their academic self-efficacy (USASE). An academic hardiness questionnaire and an academic self-efficacy questionnaire were designed, and responses from 320 students from universities in Taiwan were collected. Subjects were divided into two groups: the lower grade consists of 156 responses from freshmen and sophomores, and the higher grade comprises 164
responses from juniors and seniors. USAH questionnaire contains four dimensions: commitment, control of effort, control of affect and challenge. And the USASE questionnaire comprised of two dimensions: self-efficacy and academic self-efficacy. The results indicated strong associations between USAH and USASE. In addition, the result showed that in higher group, three of dimensions of academic hardiness (Commit, Control of effort and challenge) could be the positive predictors of the self-efficacy. Moreover, two of academic hardiness (Control of effort and Control of affect) could be the positive predictors of the academic self-efficacy. Furthermore, in lower group, the result showed that control effort can be a predictor of the two dimension of USASE. And control affect could be a predictor of self-efficacy, challenge could be a predictor of academic self-efficacy.

Engineering students' perception of academic dishonesty at an American university in the UAE: [2]In order to gain insight into students' views on the subject, engineering students at an American university in the Middle East were recently asked through a survey about their perception of various academic dishonesty issues. A questionnaire was developed and distributed to 588 engineering students in 2012. It was administered in several engineering classes of different levels in all the departments of the college. The survey also sought information on class level, gender, and major. It gathered students' opinion on 11 questions related to various matters on academic dishonesty, including awareness of student academic integrity code, perception of occurrence of various academic integrity violations, reasons for committing such acts, professors' role in enforcing penalties against violators, and recommendations to curb violations of academic integrity in the future. In general, the results of the study showed that the majority of the students are aware of the academic code of ethics and copyright laws. The main reasons for violating the code of ethics included the difficulty of courses, intensity of assignments, pressure for attaining high grades, laziness, and lack of adequate instructions by some professors. Students thought that cheating on exams does not occur as frequently as cheating on out-of-class assignments. They believed that a large number of faculty address academic dishonesty in their courses and are willing to impose penalties on those who commit acts of dishonesty. Students suggested that the best ways by faculty to reduce violations of academic integrity on campus include catching violators, giving more time to complete the assigned work, providing reasonable amount of work, and reducing the difficulty of exams. It is believed that such results are useful in enhancing strategies that are currently in place for curbing behavior related academic dishonesty.

A survey of attitudes, beliefs, and perceptions regarding the internationalization of engineering and Computer Science undergraduate programs at the University of Victoria:[3]Canadian undergraduate and graduate programs in Engineering and Computer Science attract a large number of international students. This is a relatively recent phenomenon with social and academic implications that are not completely understood. We are aware that more can be done for the recruitment, retention, and more generally for increasing the quality of the learning experience of our international students. More efforts need to be made in order to foster and expand social and academic interactions between Canadian and international students, as well as student-faculty interactions. The research described in this paper aims to identify the first steps in creating an inclusive environment that fosters academic, social, and personal growth for both international and Canadian students. This study discusses data collected about the experience of international undergraduate students in the Faculty of Engineering our university. The purpose of the data collection was to determine their specific needs, and to solicit suggestions and recommendations about ways in which to address them.

Students' perception of institutional affect towards minorities: Case-study of European, American and Australian Universities [4]: As we are facing many differences between education systems around the world, as well as high mobility among university students, it is of particular importance to examine how students perceive institution affect on their education regarding minorities. The purpose of our research was to observe how students from different countries perceive the above mentioned. In order to execute the research project, an online questionnaire was designed and administrated among students from three countries (Croatia,Australia and USA). Our results showed differences between respondents from Croatia, Australia and USA. Statistically, significant differences were found between answers to questions regarding support programs, financial support and faculty members' attitudes towards students and minorities. Our research results and conclusions can be used for planning student mobility activities, as well as for organizing minority students support programs. Questionnaire can also be implemented in other researches; especially those that will be encompass a larger number of countries than this one did.

III.METHODOLOGY

A research design is the arrangement of conditions for collection and analysis data in a manner that aims to combine relevance to the researcher purpose with
economy in procedure. It constitutes the blueprint for the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do form writing the hypothesis and its operational implication to the final analysis of data. The Research Design undertaken for the study is Descriptive one. A study, which wants to portray the characteristics of a group or individuals or situation, is known as Descriptive study. It is mostly qualitative in nature.

For data collection questionnaire method is applied. The questionnaire contains ten questions to understand students and teachers perception about KTU. The data collection is done by both field staff mechanism and also by email based response gathering mechanism. Data collected from student and faculties of various engineering colleges in Kerala. The questions of the questionnaire are given below figure 1.

The collected data is analyzed with a data analysis tool and hypothesis testing mechanism is used to test the accuracy of raised hypothesis. For that chi-square testing is used. The null hypothesis is H_0: The introduction of new methods of study through KTU will not increase the academic standard of engineering students and the alternative hypothesis is H_1: The introduction of new methods of study through KTU will increase the academic standard of engineering students. After applying chi-square test it is proved that the H_1 is true, which means the introduction of new methods of study through KTU will increase the academic standard of students

1. I am a. a)Teacher b)Student
2. Syllabus topics are from most modern concepts. a)Not at all b) Just a little c)Moderately d) Very much
3. It is good that time scheduling for university examination known at the beginning of semester. a)Not at all b) Just a little c)Moderately d) Very much 4. Syllabus emphasis on practical more than theory. a)Not at all b) Just a little c)Moderately d) Very much
5. Transfer of credits reduce burden of study. a)Not at all b) Just a little c)Moderately d) Very much
6. Application level questions increases the thinking capacity of students. a)Not at all b) Just a little c)Moderately d) Very much
7. Double evaluation of answer sheet assign deserved mark to each student. a)Not at all b) Just a little c)Moderately d) Very much
8. Result publication after a few days of examination will speed up further procedure. a)Not at all b) Just a little c)Moderately d) Very much
9. Immediate supplementary after regular gives continuation for study. a)Not at all b) Just a little c)Moderately d) Very much
10. For practical examination internal examiner can evaluate the student than external examiner. a)Not at all b) Just a little c)Moderately d) Very much

Figure1: Questionnaire

IV.EXPERIMENTS

The collected data is produced in the table below, in which Q.no is the question number question number in figure1 questionnaire. The survey details are given in percentage. In the survey there are 82 percentages of students and 18 percentages are teachers. Further details are given in the table.

Table1: Survey details

Q.no	Not at all (in %)	Just a little (in %)	Moderately (in %)	Very much (in %)
2	6	24	54	16
3	7	9	25	59
4	16	26	39	19
5	15	23	36	26
6	15	14	22	49
7	15	17	17	51

8	3	4	12	81
9	6	5	17	72
10	5	16	27	52

The equation for chi-square testing is:

$$\chi^2 = \Sigma \frac{(O_{ij}-E_{ij})^2}{E_{ij}}$$

Where,

Oij=observed frequency of the cell in ith row and jth column.
Eij=Expected frequency of the cell in ith row and jth column.
The null hypothesis and alternative hypothesis is given below.
H0: The introduction of new methods of study through KTU will not increase the academic standard of engineering students.
H1: The introduction of new methods of study through KTU will increase the academic standard of engineering students.
The two samples taken for test are Q.no 2 and Q.no6.Sample details for testing are given in the table1 and the chi-square values are given in the table2. The Degrees of freedom= (n-1)(m-1)-1.

Table 2: Selected Sample Data Details

Sample	Not at all	Just a little	Moderately	Very much	Total
Syllabus contain advanced topics	O11=6 E11=10.5	O12=24 E11=19	O12=24 E11=19	O14=16 E14=32.5	100
Application level questions are good	O21=15 E21=10.5	O22=14 E22=7	O23=22 E23=11	O24=49 E24=32.5	100
Total	21	38	76	65	200

Table 3: X^2 Value Table

χ^2 values
1.9286
1.3157
6.3769
8.3769
2.8809
7
11
32.5
Total=71.74

Here d.f =(4-1)(2-1)-1 =2 At 2 d.f. and 5 percentage level of signicance and the critical value is 5.991 and calculated value is 71.74.

The calculated value 71.74 much greater than critical value, so, rejecting the H_0 hypothesis, which states that Academic standards of students cannot be increased through new university KTU. Therefore Accepting the H_1 (alternative hypothesis):Academic standards of Engineering students can be increased through new university KTU.

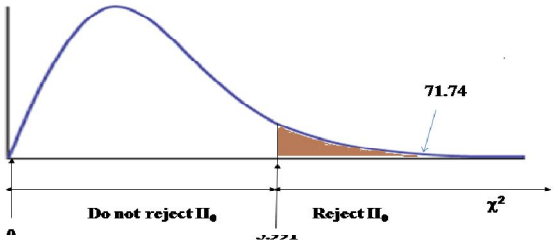

Figure 2: χ^2 test with d.f=2

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REFERENCES

[1]. Shr-Kai Jang,Jyn Jong Jyng "Perception of Academic Self-Efficacy and Academic Hardiness in Taiwanese University Students",Advanced applied infromatics,IEEE 2016 5th international conference on.

[2]. Sami W.Tabsh,Akmal S," Engineering students' perception of academic dishonesty at an American university in the UAE" Global Engineering Education Conference (EDUCON), 2016 IEEE.

[3]. Holly Tukyo,Anna Braslvsky," A survey of attitudes, beliefs, and perceptions regarding the internationalization of engineering and Computer Science undergraduate programs at the University of Victoria", Frontiers in Education Conference (FIE), 2012.

[4]. Alen Delic,Katrina Pazur," Students' perception of institutional affect towards minorities: Casestudy of European, American and Australian Universities" MIPRO, 2012 Proceedings of the 35th International Convention.

[5]. Smmer N Hammade," Student Perceptions of Learning Management Systems in a University Environment: Yahoo Groups vs Blackboard", Information Technology: New Generations (ITNG), 2012 Ninth International Conference.

[6]. Ahamd Al Hammed," Student's Perception of an Online Exam within the Decision Support System Course at Al al Bayt University",Computer Research and Development, 2010 IEEE Second International Conference