Universities That Bring About Change In A Changing World: A Model Suggestion

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Abstract:A closer examination of history reveals that humanity has been undergoing a constant development, particularly after the discovery of writing, numerals and zero. Alvin Toffler in his book "The Third Wave", describes three great revolutions that occurred since the creation of the world: the agricultural revolution, the industrial revolution, and the information revolution. Education/training, particularly higher education, has come to be regarded as the most important factor that changes, improves, and shapes the society. It is also known that with this fact in mind, governments may tend to establish universities in the regions which they want to change and improve. Why would students and parents still choose the universities that are far away from their hometowns or located in other regions? It may be suggested that qualities of universities play an important role in their decisions. But are people motivated solely based on the qualities of universities? Are there other factors involved? Also, can the high preferableness of a university be considered as the only criterion for its success? Which factors are more effective in students' university preferences?Do such factors as qualification of university lecturers, the number of students per lecturer, the employment opportunities after graduation, and prestige play a role in students' choosing a particular university? If yes, to what extent? What should be the measurement metrics for a university? Are "quality of education," "internationalization," "research," and "prestige" sufficient metrics in this regard? Why does a specific country attract more international students than others? Why do other countries send students to that specific country? What are the numbers of universities of countries? What are the capacities of these universities and are these capacities adequate?In order to measure the performances of university lecturers, is it adequate to assign some scores to their academic works, particularly asking lecturers to publish works in a foreign language as well as encouraging them having works published in a way to get more citations. This study evaluates the strategic positions of the universities around the world and discusses their projections. It examines such issues as the qualities of a good university, criteria of performance measurement, qualities required for attracting international students.

Introduction

The important turning points such as industrial revolution and information society in the process which has come so far has turned universities into means of global change. While universities derives strength from the society which they are in and at the same time they are main factors which affect the capacity of change in the society However all universities are not the same. The efficiency degrees of universities are different from each other. Which sub values are these differences based on?

In this context, main reasons of why students prefers universities located in other regions, the degree of importance of these,

        The qualities of academicians
        The number of students per academician

The possibilities or opportunities of finding a job after graduation, prestige of the university

When efficient factors and measurement criterion for the *preferableness* of universities are considered, education quality, internationalisation, the number of universities, which internationally cooperated with, the number of research publications, prestige of university could be seen.

Why does a country attract more international university student than others?

Why do countries send students to universities in other countries?

Two factors play main role in international student mobilisation. These are 1) the impulsive factors in students' country (difficulties) 2) the attractive factors of the specific country (facilities). What are the numbers of universities of those countries? What are the capacities of these universities and are these capacities adequate?

In order to measure the performances of university lecturers, is it adequate to assign some scores to their academic works, particularly asking lecturers to publish works in a foreign language as well as encouraging them having works published in a way to get more citations?

The main difference established by this model is that we use the term education to denote some different qualities, including occupational capabilities, moral modeling and behavioral modeling (AJZEN, I. 1988; TAJFEL, H. and Turner, J. C. 1986).

When we approach universities as a system, it is seen that the system is a higher education system with its inputs, process and outputs. This study is based on results, which have come by looking at only outputs in order to evaluate an university university (ARWU, 2009; PENN State University, 2006; Webometrics Ranking of World Universities; THES - QS World University Rankings). As it is seen on figure 1, total quality of outputs for a system is related with the qualities of inputs and process (ENQA, 2005). According to this, when the output is measured, the quality of input and process will be understood. Many factors are developed in order to measure the efficiency and outputs of university (KETTUNEN, Juha and Mauri Kantola, 2007).

Efficiency measurement in university is related to how much the level of inputs' quality increase. Therefore, as a methodology, the comparison between the levels of students when they were and the levels of final year and after graduation is adopted.
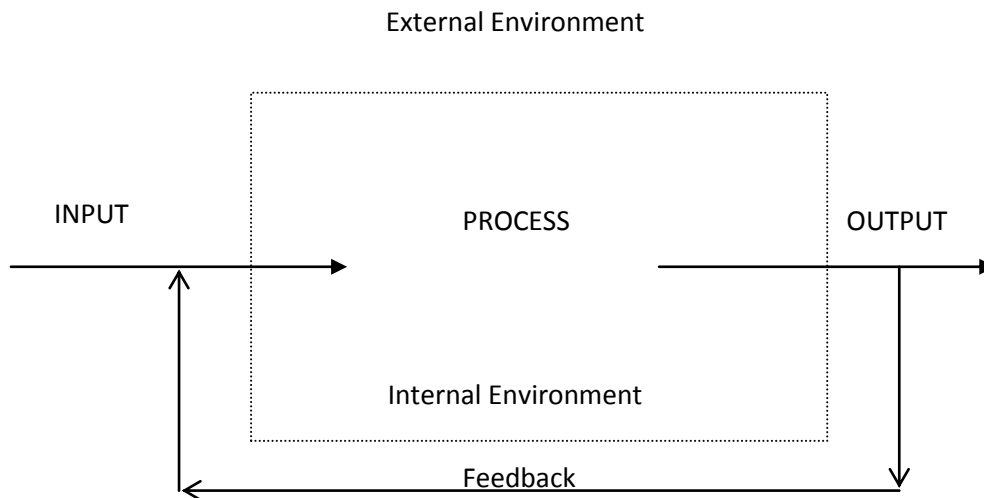

Figure 1: System and Components

Teaching and Education in Universities

To measure the level of education in universities, the parameters in Table 1 could be used.

	Indicator-1: Education-Training
A	1. Total number of registered students
A	2. The average of scoring during the registration
A	3. The number of beneficiary students and their percentage
A	4. The percentage of international students
B	5. The Number of students' projects
B	6. The number of students who are awarded
B	7. Percentage of graduation on time
B	8. Percentage of students academic success
C	9. The percentage of placement of graduates
C	10. Average of Graduation Degree
C	11. The Level of wages that graduates earn
D	12. The percentage of student/academician
D	13. The length and duration of student-lecturers' meeting outside lectures
D	14. The percentage of student/academic adviser numbers
D	15. The percentage of student/computers
D	16. The duration of Internet access per lecturer
D	17. Duration of internet access per student
D	18. Percentage of international academician
D	19. Number of books in the library
D	a. The number of books per lecturer
D	b. The number of books per student
D	20. The number of electronic library membership
D	21. Indoor space (square meter)
D	22. Outdoor space (square meter)
D	23. Students' Income
D	a. The rate of incomes from national students to budget
D	b. The rate of incomes from international students to budget
D	24. The number of foreign languages in which education is carried on

Table 2: Indicator-1: Education-Training

The indicators, which show the potential of newly registered student, are shown in first chapter.

In second chapter, the indicators of advantages students gain at the university are taken place.

In third chapter contains the criteria for the measurements of success of the students during and after the graduation time

In the four chapter includes factors which will discover the success of university's first, second and third sections.

Research and Publication in Universities

The criteria in selection and promotion of academic personnel that is the most important human resource for a university is shown Table 2.

	Indicator-2: Research-Publication
	1. Number of Articles in National Refereed Journals
	2. Number of Articles in Internationally Cited Journals
	3. Number of National Paper
	a. Number of national papers per academic personnel
	4. Number of International Papers
	a. Number of international papers per academic personnel
	5. Number of Books
	a. Books with Editing
	b. Chapters in Book
	c. Books in Foreign Languages
	d. Books per lecturers
	6. Number of Projects
	a. Number of National Projects
	b. Number of International Projects
	c. Number of Local Projects
	d. Projects per academic personnel
	7. Total Number of Citations
	a. Number of Citation per academic personnel
	8. Number of Copy Rights, Licences, Patent and Innovations
	a. Number of patents per academic person
	9. Annual Income from Research and Publications
	a. The percentage of Annual Income from Research and Publications in the budget

Table 3: Indicator-2: Research-Publciation

In this chapter, the factors, which show scientific image of university, the successes in the post graduation level and the acceptance of higher-level students, are pointed out.

The activities in this section could be classified as national, international activities and scientific publications and projects. These activities could be sum up as the studies, which academic personnel carry out in order to improve themselves and contribute the world of science (ELTON, Lewis ,2008). Consequently, these efforts contribute to universities. As a result, the scientific level and image of a university becomes apparent. This situation provides the applications of high-level undergraduate and postgraduate students and offers opportunities for students with potential to join the scientific studies and projects.

Universities' Services to Society

The factors in this chapter are the ones that cause the integration of university with the society and embracement of university by the society.   Components that provide universities sufficient possibilities to develop strong relations with partners and joint owners are examined in this chapter. In the widest meaning, whole humanity is universities' natural partners. Therefore, solution suggestions of academicians for every kind of problems, which are in regional, national or international level, are expected. It is possible to separate indicators, which are shown at Table 3, into three main sections for the purpose of service to society. These can be classified as A) to find solutions to problems, B) In cooperation with partners, improvement and development, C) the components of income. While generating solutions to problems is being fulfilled after problems emerged in the form of intervention, collaboration with partners with an empathetic approach means works with future projection before the problems arise. Final chapter also analyses the donations and services of university in return of income.

	Indicator-3: Service to Society
A	1. Number of Suggestions for Solutions of the Local and Regional Problems
A	2. Number of Suggestions for Solutions of National Problems
A	3. Number of Suggestions for Solutions of International Problems
B	4. Number of Projects for the Cooperation of University and Society
B	a. Number of people who are served in the university hospitals
B	b. Number of People who are benefited from the services towards disadvantages groups.
B	5. Number of Projects about cooperation of University and Industry
B	6. Numbers of Project for the Cooperation of university and NGO's
B	7. Number of Projects for the cooperation of University and State
B	8. Number of Hours for the Education open to Public
B	9. Number of Participants for the Education open to Public
C	10. Proportion of Incomes from the Social Service Projects in the University's Budget
C	a. Proportion of Incomes from the State in the Budget
C	b. Proportion of Incomes from the donations in the Budget
C	c. Proportion of other incomes in the budget

Table 4: Indicator-3: Service to Society

The Moral (Ethical) Values in the Universities

Indicators that are obtained by analysing moral and ethical values in universities in terms of students and staff are taken place in Table 4. The basic reason for measuring these values in terms of personnel is related to the necessity of setting example for students[37].

	Indicator-4: Moral Values
A	1. Staff number and ration of alcohol dependents
A	2. Staff number and ration of drug addicts
A	3. Intended disciplinary staff ratio
A	4. Staff number and ratio who committed an offence or crime
A	5. Staff number and ratio of smokers
A	6. Number and ration of personnel involved in an ideological event
A	7. Number and ration of personnel carrying cutting tools, and lethal weapons
B	8. Student number and ration of alcohol dependents
B	9. Student number and ration of drug addicts
B	10. Intended disciplinary student ratio
B	11. Student number and ratio who committed an offence or crime
B	12. Student number and ratio of smokers
B	13. Number and ration of students involved in an ideological event
B	14. Number and ration of students carrying cutting tools, and lethal weapons

Table 5: Indicator-4: Moral modeling educational indicators

Values that we wish to transmit to students via leading by example

There are some values in universities that cannot be digitalised therefore cannot be measured. However according to Likert scale, it is possible to obtain some ideas about these values. These values can be seen in Table 5. These values contribute the enrolment of qualified students to universities. The values classified in three sections. These are A) Values related to university's name and brand which look at external environment, B) Values that develop university and productivity of staff and students are related with internal affairs. C) High values which separates university from others.

Below mentioned list of values cannot be teached or quantized readily. They only can be transmitted by behavioral leading by example to students. These positive qualities cannot be dictated in any way but they can be embraced by the students solely due to their free will if the staff can establish an attractive and positive image.

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[37] Akademisyenin anlattıklarını kendisi yaşayarak verdiğinde daha etkili olduğu bilinmektedir.

	Indicator-5: Values that cannot be digitalised
A	1. Institutional Culture (Values, Beliefs, attitudes, the way of thinking and moral sense)
A	2. Prestige
A	3. Brand recognition and awareness
B	4. The presence of Academic Freedom
B	5. The presence of Freedom of Thought
C	6. Existence of Ethical Values
C	7. The presence of universal humanist values
C	8. The presence of sense of solidarity
C	9. Presence of Confidence and Trust

Table 6: Indicator-5: Values that we wish to transmit to students via leading by example

Conclusion

In this study, the proposition of university model that contains values, which are expected to be in a university could contribute positively to the changes in the world is developed. This proposed model is built on outputs since it would be too difficult and to wide to analyze whole university system. To measure outputs will give us important information about the inputs and the process since quality outputs depend on quality inputs and process.

In this model the reasons of university preference have been analyzed from different dimensions such as the quality of education, research and publications, the popularity of the university and the culture of institution

The question of why any university is more attractive than other universities for international students and why students do not prefer domestic universities but go to foreign universities was answered by the model as a result of international publications and projects, and academic freedom which are essentials for international popularity.

Proficiency level of universities will be assessed with comperative analyses of the number and capacity level of both domestic and foreign universities

Many methods have been developed so far to measure the efficiency of universities. These measures mostly depend on education and research-publication measures. Many times even education was out of measurement. But differing from other models, this model supplies new measures in respect to social service, role model of academics to students in the education process and moral values beside of education and research-publication measures.

The essential point of this model is the acceptance of positive behavioral moods via academic and administration stuff who are complete exampler for students and society rather than unflexible administrative rules. It is clear that enforced and administrated changes are not permanent but self-preferred and beloved changes are permanent.

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