The Correlation between Tracer Study and Curriculum Relevance

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Abstract— **In many places in reality, agricultural's graduate works in a bank, a graduate majoring in economics became a journalist, and a law graduate into a credit analyst; this fact leads us to the question of what causes a gap between the world of higher education and the labor market. In other words, rapid changes in the working world as a result of globalization and revolution in the field of information technology, and science, have demanded anticipation and evaluation of the competencies needed by the world of work. Therefore, evaluation is also important so that there is no gap between the education world, specifically higher education world, the working world and the society's needs. Higher education as part of the national education system has a strategic role in educating the life of the nation and improving its competitiveness in facing globalization in all fields. Hence, there is curriculum in university that has to meet this new challenge. It must always be ensured that universities have relevance curriculum which are periodically updated in accordance with the current state. In this context Ministry of research, Technology, and Higher Education has stated that tracer study is a significant step to address this new challenge.**

Keywords— *curriculum relevance, graduates, tracer study*

I. INTRODUCTION

To find out the extent of the relevance of the curriculum in building graduate's ability to compete in the woking place, it is necessary to identify the profile of graduates. The results of this identification will provide an overview of the curriculum relevance with the competence of the graduates. Therefore, there is tracer study that must be conducted by universities in following the development of graduates. Tracer study is a trace tracking of graduates / alumni conducted about 1-3 years after graduation. Tracer study aims to determine the outcome of education in the transition from the world of higher education to the working world, educational output, namely self-assessment of mastery and acquisition of competencies, the education process.

The form of evaluating the learning process and the contribution of higher education to the acquisition of competencies, educational input in the form of further excavation of information sociobiographical graduates. This explanation shows the many benefits obtained by universities through tracer study activities. The benefits are not only related to the use of tracer study information information for graduates themselves, but also the important thing is to be an input for the improvement and improvement of the educational process carried out in tertiary institutions, especially at the level of study majors' programs.

In educational research, according to Schomburg [7], tracer study is a survey of graduates from institutions of higher education since its target groups is the alumni. The ILO Thesaurus 2005 defines a tracer study as an impact assessment tool where during evaluation the "impact on target groups is traced back to specific elements of a project or programme so that effective and ineffective project components may be identified." Schomburg [7] noted that graduate surveys are popular for "analysis of the relationship between higher education and work." They provide quantitative-structural data on employment and career, the character of work and related competencies, and information on the professional orientation and experiences of their graduates.

University has an important role in preparing graduate's competencies, in order to meet the requirements of human resources for companies or businesses. Competencies possessed by graduates from the university have a major contribution in helping graduates find job. Every graduate certainly hopes to immediately get a job that is in accordance with their field of expertise (majors taken / concentration taken at the time of study). However, in reality, many graduates don't work in their fields of expertise. For instance, literature and linguistics graduates working in banks, or economics graduates who works as a programmer. Kellerman and Sagmeister [2] stated that it can be caused by the fact that the university system has distance with the needs of stakeholders so that indicators of study success cannot anticipate the competencies of graduates or the working world

may not be well organized. Therefore, graduate skills cannot be utilized efficiently (under utilization), or the another possibility is graduates have abilities that exceed the competency requirements in the working world (over qualification).

Whether or not a graduate works in a company depends on the competencies of the graduates and their relevance to the job or position to be occupied by graduates in the company. Competencies possessed by graduates are built from the skills, knowledge and abilities of the graduates themselves. According to the decree of the Minister of National Education Republic of Indonesia Number 045 / U / 2002 about the core curriculum of Indonesian education competencies are: "A set of smart, responsible actions owned by a person as a condition to be considered capable by the community in carrying out tasks in certain fields of work.

Demands of competence in the working world today are experiencing dynamic changes. Teichler [3] [4]; Yorke and Knight [6] observed important changes in the dynamics of the relationship between higher education and the working world, especially related to the gap between higher education outcomes and demands for competence in the working world. Some important shifts that occur include an increase in educated unemployment both open and veiled unemployment as a result of the massification of higher education, changes in socioeconomic structure and global politics, as well as the rapid development of science and technology so as to cause a variety of fundamental changes in terms of qualifications, competencies, and requirements for entering the workforce

The success of higher education in penetrating the world of work, Teichler [4] mentions 5 main criteria for success, namely:

1) A smooth transition from higher education to the working world includes a short waiting period for work and a simple job search effort.

2) Low unemployment ratio

3) Low ratio of non-regular work

4) The success of graduates vertically in the sense of educational investment has a higher profit or income of graduates compared to non-graduates or a high graduate employment ratio

5) The success of graduates horizontally in the sense of a close relationship between the field of study and type of job or the high utilization of knowledge acquired during higher education in employment

Issues related to the relevance of the work to the competence of field expertise become a hot topic being discussed at this time. the large number of university graduates working in areas that are not in accordance with the field competencies obtained at the university are in the spotlight of the community which in turn emphasize skepticism about the quality of higher education level.

II. METHOD

This research is qualitative research. The researcher used survey on online platform, namely *Jobstreet.com*. By knowing the results of survey, the researcher tried to explain the relationship between the tracer study and curriculum relevance. Then, data of this research were supported by the previous studies.

III. RESULTS AND DISCUSSION

A. Incompatibility between Graduates Competence and Their Job

A survey conducted by Jobstreet, an online survey platform, in 2018 showed that 54% of university graduates worked in jobs that were not in line with their area of expertise. Economics graduates are not always economists; law graduates are not always law practitioners. Is it hard to get a job according to the department? Quite a few fresh graduates decide to work in a completely different field from the previous lecture majors. Maybe we have met graduates of the agricultural faculty working in banks, graduates of the geography faculties in entrepreneurship in the field of printing, while architectural graduates' entrepreneurship producing healthy snacks. This is the facts we can face in Indonesia nowadays. The question is whether this is the case because the personal desire of the graduates or due to circumstances that require them to undergo work that does not correspond to their field of expertise.

University graduates can access more opportunity nowadays, it is not only being an employee, but also being an entrepreneur. Employment is now considered still not maximized due to undergo various obstacles. The two most problematic problems are related to mismatches of work and workers with abilities below qualifications. Labor Minister Hanif Dhakiri say, new labor force growth averaged around 2 million people. Of this amount, around 37% of the workforce works in accordance with the major of education they pursue. This means that as many as 63% of Indonesians work not according to their majors (Kompas, issue of August 20, 2018). "This is a problem, per year the new workforce averages 2 million. Of these two million there are 2 main problems, one high mismatch. Only 37% (who work according to their expertise area)," said Hanif at the Bappenas Office, Jakarta,

There are indications of employment inequality in Indonesia causing gap between university graduates and labour market needs. There are certain majors that do have fewer jobs compared to other majors and there are some jobs that are not required specific competencies, so that graduates of all majors can access this job (for example some positions in Bank that can access by all graduates, not only economic graduates). In Bank, we can find linguistics graduates working as teller, customer service, and credit analyse. Then, a new question arises about the ability of university to provide their students with suitable competencies needed after they graduate and entering working world and whether the university have good career planning based on student's competencies.

B. Curriculum Relevance

Relevance of education is the relevance level of objectives and program outputs in terms of the normative ideal size supported by the accuracy of the input, process and output elements. The relevance of education are a broad, potential concept which is ambiguous and multi-dimensional. Budd, J.M in Tritjahjo [5] states the following three things, namely:

1) Relevance is a multidimensional cognitive concept whose meaning is largely dependent on uses' perceptions of information and their own information-need situations

2) Relevance is a dynamic concept that depends on users' judgments of the quality of relationships between information and information-need at a certain point in time.

3) Relevance is a complex but systematic and measurable concept if approached conceptually and operationally from a user's perspective.

Specifically, the principle of relevance in curriculum means the principle of conformity. This principle has two types, namely external relevance and internal relevance. External relevance means the curriculum must be in accordance with the demands of society that exists today and the needs that are predicted in the future. The curriculum must be able to prepare a learning program for students to prepare them to be able to adapt within the society, meet the expectations and needs of the community as well as the situations and living conditions of the communities where it is located. The curriculum can meet external relevance if curriculum developers have the knowledge and insight about people's lives in the present and the future [6].

The principle of external relevance in curriculum development is divided into three, namely: (1) Sociological relevance, meaning that the curriculum development process must be relevant / in accordance with the environmental conditions of students. (2) Epistomological relevance, meaning that the contents of the curriculum must be in accordance with the demands of science and technology. (3) Psychological relevance, meaning that the contents of the curriculum must be in accordance with the demands of the world of work and the students' profession. While internal relevance, namely the compatibility between curriculum components themselves.

The curriculum is a system established by subsystems or components of objectives, content, methods, and evaluations to achieve specific goals, learning and student abilities. A good curriculum is a curriculum that meets the requirements of internal relevance, namely the coherence and consistency between components. This must be considered because each particular goal will require the existence of its own content, methods and evaluation system. Mismatch in these components will cause the curriculum will not be able to achieve its objectives optimally. The implication of this principle is that curriculum developers must understand very well the types and nature of curriculum objectives, curriculum content, learning methods, and evaluation systems.

C. Tracer Study's Instrument Initiated by Higher Education Ministry

Ministry of Research, Technology, and Higer Edcation has its own vision related to the goal of higher education implementation in Indonesia, namely The realization of high quality education and the ability of science and technology and innovation to support the nation's competitiveness. In order to emerge this vision, two missions have been established that were considered to have significance in the current context of the education as follows:

1) Improving access, relevance, and quality of higher education to produce high quality human resources; and

2) Improving the ability of science and technology and innovation to produce added value of innovative products.

From those missions it can be conclude that high quality of human resources, in this context university graduates, have to master specific competence based on their field of education and also grasp the science and technology as a part of supporting system in this era. Higher education level is expected to be able to bridge between educational world and working world. This can be occurred through the ability of the higher education level, in this case university, to establish suitable curriculum, which can improve student's competencies based on the needs of the stakeholders and current society. To identify the extent to which the curricula of universities in Indonesia is able to accommodate the competence of graduates so that according to the stakeholders need, then Dikti compiled a list of 18 tracer study questionnaires, which consists of (Dikti, 2016) :

1) Graduates biodata
2) When did you start looking for a job? Please do not include any odd jobs
3) How do you find the job? Answers can be more than one
4) How many months were spent (before and after graduation) to get the first job?
5) How many companies / agencies / institutions have you applied for (by mail or e-mail) before you got your first job?
6) How many companies / agencies / institutions responded to your application?
7) How many companies / agencies / institutions invited you to interview?
8) Do you work now (including part-time and entrepreneurial work)?
9) How would you describe your current situation? Answers can be more than one
10) Are you actively looking for work in the past 4 weeks? Choose One Answer.
11) What type of company / agency / institution do you work now?
12) Where do you work at? (Indonesian Business Field Standard Classification, Kemnakertrans, 2009)
13) Approximately how much do you earn each month?
14) How close is the relationship between the field of study with your work?
15) What level of education is the most appropriate / suitable for your current job?

16) If you think your current job does not match your education, why did you take it? Answers can be more than one

17) At the time of graduation, at what level do you master the competencies below?

18) At the time of graduation, how the contribution of higher education in terms of competency below?

These points will assist universities to ascertain the testimonies of their graduates during the process of finding work up to getting it, whether their obtained work is in accordance with the competencies of the majors and whether the university is able to accommodate them with the non-academic competencies required in the world of work

IV. CONCLUSION

By knowing the explanation above, between curriculum and graduate competencies have a significant relationship. In other words, to produce graduates who have competencies that are in accordance with the needs of the labour market, a curriculum that is relevant to the needs of stakeholders and the community is needed. Higher education institutions must carry out regular labour market needs analysis, so that they are able to continue to update the relevant curriculum, which can bridge the gap between the graduates' competencies and the labour market. In this context tracer study exists as a way to identify whether the applied curriculum is adequate to accommodate graduates in the working world. The notion working world nowadays must be defined as formally working in the office and also being an entrepreneur. Both of these require specific competencies to be grasped in accordance with the specifics of the majors.

Finally, it can be clearly stated that Quality and relevance and competence are three aspects of higher education that are interrelated and have a direct contribution to improving the nation's competitiveness in the field of human resources. The competition for job seekers from higher education graduates in Indonesia demands the attention of higher education providers to always make curriculum adjustments. Increasing the relevance of education should be the goal of continuous quality improvement as part of an overall higher education quality assurance system.

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