

Building Alumni Data Centre through Tracer Study Implementation (Case Study at FEB Unsoed)

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ABSTRACT

This research is development research adapted from development research according to Borg and Gall which includes four stages of development, where the stages in the development carried out include preliminary studies, development, field testing, and dissemination. However, this research has only reached the development stage. The research objectives are to identify the needs of the Universitas Jenderal Soedirman's Faculty of Economics and Business (FEB Unsoed) related to alumni data as well as identify and evaluate the implementation of data collection related to alumni that has been carried out by FEB Unsoed. By using interviews and observations, research data was collected. The results of data analysis show that the data needed from alumni are alumni profiles, profiles of institutions where alumni work, the process of getting a job, the suitability of alumni education with their work, and emphasis on learning methods. The research results also show that FEB Unsoed has carried out tracer studies regularly since 2020 using a single instrument. Study tracers are carried out by study program teams consisting of study program coordinators, surveyors, and data analysis teams. The database is centralised at the university, but courses can download the data and analyse it on their own.

Keywords: Alumni Data Centre, FEB Unsoed, Tracer Study.

1. Introduction

Tracer study is a study of tracing the traces of graduates / alumni conducted to alumni from six months after graduation. Tracer study aims to determine educational outcomes in the form of transitions from the world of higher education to the world of work. The output of education is self-assessment of mastery and acquisition of competence, the educational process in the form of evaluation of the learning process and the contribution of higher education to the acquisition of competence, as well as educational input in the form of further exploration of graduate socio-biographical information (DIKTI's Online Tracer Study System Guide).

In addition to accreditation purposes, the Directorate General of Higher Education (DIKTI) of the Ministry of National Education has also been using tracer studies since 2011 as a tool for monitoring the adaptation of university graduates in Indonesia when they enter the world of work. The purpose of the tracer study is to find out the educational outcomes produced by higher educations and to find out the contribution of higher educations to the competencies that exist in the world of work. Apart from that, a tracer study is also carried out to monitor the adaptation of university graduates when entering the world of work required by DIKTI.

The implementation of this tracer study also has good benefits for universities, DIKTI, as well as industry. For higher educations, tracer studies provide information about the distribution of higher education graduates. In addition, the results of the tracer study can also be used as material for higher education evaluation of the graduates produced whether they have met the appropriate competency standards in the world of work. Tracer studies also provide information about competencies that are relevant to the world of work that can assist efforts to improve curricula and learning systems. In addition, tracer studies are also an added value in the higher education accreditation process.

Tracer studies also provide benefits for DIKTI as a monitoring tool for them for higher education graduates when they enter the world of work. For the industry, the results of this tracer study serve as a reference material in making more relevant trainings for new job seekers graduates. The need for data for each study program is increasingly urgent. Several study programs within FEB Unsoed will carry out accreditation at both the national and international levels. Undergraduate Program in Economics and Development Studies, Management, and Accounting will carry out FIBAA accreditation. Apart from at the faculty level, the results of this tracer study are also needed in university rankings, evaluation of learning systems, and evaluation of alumni performance seen from the user's perspective.

Given the urgent need for data availability for accreditation, learning evaluation, university rankings, and graduate performance evaluations, it is necessary to develop an effective FEB Unsoed tracer study model to increase alumni participation. The hope is the availability of data needs for the benefit of faculties and universities.

Based on the goals of FEB Unsoed which want to produce graduates who are moral, dedicated academically and professionally, have competitive advantages, are able to lead, as well as are adaptive, it is necessary to evaluate the quality of graduates at this time. The quality of graduates can be assessed from several indicators, including the waiting time until they get their first job and the relevance of the field of work where they are currently engaged in. Another criterion is the scale of the institution where they work, the business they are currently in, and the first salary they receive.

The criteria for the quality of graduates can also be assessed by users from a number of things, namely ethics, main competencies (fields of knowledge), foreign language skills, ability to use information technology, teamwork skills, and self-development. Information about the quality of graduates as assessed from these various things can be obtained by

conducting tracer studies and user satisfaction surveys. The information obtained from this research can be used as feedback on the learning process that has been carried out so far at FEB Unsoed. In addition, the results of this research will be used as a system that is carried out continuously and is useful for providing data for higher education accreditation and ranking.

This research involved partners, namely the Unsoed's Faculty of Economics Alumni Family (KAFE) of KAFE Unsoed. Together with these partners, the ideal tracer study model development program for FEB Unsoed for data needs for various study program accreditations, learning evaluations, and alumni performance evaluations from the user's perspective can be met. In addition, by working with KAFE Unsoed, it is hoped that the alumni's response to filling out the study tracer will be better. Based on interviews with the Head of KAFE Unsoed, information was obtained that partners were willing to cooperate and assist FEB Unsoed in developing a tracer study model for FEB Unsoed. This assistance is in the form of providing workshop material related to tracer studies to alumni, the role of alumni in higher education KPI achievements, and evaluating the performance of alumni as users.

Based on the background of the problems that have been described, the formulation of the problem in this study is regarding; 1) What data is needed by FEB Unsoed regarding alumni and alumni users; and 2) How is the implementation of the tracer study that has been carried out by FEB Unsoed.

2. Literature Review

One way to gather information related to the transition from college to work is to carry out a study known as a tracer study. Tracer study is a study of graduates of higher education (Pimpim, 2009). This study is able to provide a variety of useful information for the purposes of evaluating higher education outcomes and can subsequently be used to improve and guarantee the quality of higher education institutions and the world of professional work, assess the relevance of higher education, provide information for stakeholders, as well as complete the requirements for higher education accreditation. Graduate tracking is empirical research that can produce valuable information in evaluating an educational program. Study information can be used as a quality assurance measure for the institution as a whole, in the sense that the institution makes continuous program improvements according to input from the results of the graduate tracking study (Schomburg, 2003).

Tracer study is a method used by several universities in Indonesia to obtain feedback from alumni. The feedback obtained from alumni is needed by universities for evaluation in the context of developing the quality and education system. This feedback can also be useful for universities to map the world of business and industry so that the gap between the competencies obtained by alumni while in college and the demands of the world of work can be minimised (UPJ's Tracer Study Report, 2020).

Graduate tracing studies play a role in evaluating the curriculum of a learning program as well as showing the program's strengths and weaknesses so as to produce basic suggestions for improvement. This study can be the basis for seeing the relevance and effectiveness of the curriculum being taught in accordance with the needs of the labour market, and how well the applicable curriculum can prepare alumni to face the demands of change in their work environment, as was the case with a study conducted by Delaney (2000).

Alumni have a more independent bond with the institution where they study, so alumni have a more objective perception and perspective in evaluating the learning

programs they have taken. Thus, the opinion of alumni is very valuable information for the development of an institution. Schomburg (2003) proposed a new approach for graduate tracking studies to be used as a basis for planning future programs and activities. In this study, in addition to information on the relevance of the knowledge and skills acquired by graduates to needs in the workplace, the professional successes of graduates are also traced, such as career paths, employment status, and income. In addition, job satisfaction of graduates is also an important indicator of the success of a program, as a study conducted by Cabrera et al. (2008). Thus, the role of graduate tracing studies is very important to measure the output and outcome of higher education institutions which is in line with the presentation of DIKTI (2011) that tracer studies aim to determine educational outcomes in the form of transition from the world of higher education to the world of work. The output of education is self-assessment of mastery and acquisition of competence, the educational process in the form of evaluation of the learning process and the contribution of higher education to the acquisition of competence, as well as educational input in the form of further exploration of graduate socio-biographical information

Zulhimma (2015) stated that a tracer study aims to: 1) Explore information whether there is a gap between the education provided and the world of work (business world) that alumni enter; 2) Explore more detailed information regarding the relevance of competencies between the needs of graduate users and those obtained by alumni; as well as 3) Explore information regarding developments in the world of work for the future as a measure to anticipate adjustments for higher educations. Against this background, each higher education should conduct graduate tracing through a tracer study so that it is able to increase the competency of its graduates from year to year.

Based on the research results of Bakhtiar and Latif (2017), the tracer study instrument provides an overview of how big the role of alumni is in the development of study programs from various academic fields, both in terms of curriculum development, learning, competence, as well as existing facilities and infrastructure. The relationship between graduates and alma mater needs to be improved, because, when viewed from the experience of well-known educational institutions, strong ties between graduates and alma mater will bring many benefits to the alma mater as the progress of graduates is recognised in society (Soemantri, 2010: 4). Conrado et al. (2016) in their research proved that a tracer study is able to measure the quality of higher education and its relevance to the world of work, so that this is the basis for curriculum evaluation to improve the competence of the following year's graduates.

More specifically, the results of Chandra et al. (2014) succeeded in explaining the impact of tracer studies on increasing graduate competence. The E-Tracer Study application that was built is able to meet the needs of higher educations in curriculum improvement and determine the level of satisfaction of college graduate users. This makes the university able to formulate the curriculum and learning evaluation that is applied so that it can increase the competence of graduates in the following years. The existence of a career centre institution at a higher education in which electronic tracer study services are provided has been proven to increase the popularity of a higher education. The amount of content or documents in the career centre is still relatively small when compared to the total contents of college websites. Providing alumni forums and career consultations has had a significant impact on the popularity of career centre institutions (Chandra et al., 2013).

Based on the results of the research, it can be concluded that the evaluation of the competencies needed by the world of work is needed by higher educations, so that there is no distance between the world of higher education and the real world of work in society. This can be realised when higher educations are able to carry out tracer study activities properly. Tracer study activities are carried out to examine and analyse the relevance of the

learning that has been carried out with the needs of the world of work. After the tracer study data is available, it is hoped that it will be able to become evaluation material so that it can increase the competence of FEB Unsoed graduates from year to year to apply the knowledge and skills they have, encourage and facilitate graduates to be able to recognise their own potential that can be developed, as well as be able to apply knowledge acquired when entering the world of work.

3. Research Methodology

This research is an R&D research that aims to produce a model for increasing the competence of FEB Unsoed graduates. The development of the model in this study followed the procedure for developing the Four-D model (Thiaragajan et al., 1994). The stages of the Four-D model include the define, design, develop, and disseminate stages. The design of the model in this study has not yet reached the disseminate stage.

The steps taken were: 1) Mapping the data needed by FEB Unsoed regarding alumni and alumni users; as well as 2) Evaluating the implementation of tracer studies that have been carried out by FEB Unsoed. The indicators of the success of this research are: 1) Availability of data needed by FEB Unsoed regarding alumni and alumni users; 2) The results of the tracer study evaluation conducted by FEB Unsoed; as well as 3) The identification of programs to increase the quantity and quality of FEB Unsoed alumni data.

4. Results

This study answers two research problems, namely the data needed in a tracer study and a user satisfaction survey. The data needed by FEB Unsoed is related to alumni and alumni users.

a. Data Required in Tracer Study and User Satisfaction Survey

In accordance with the questionnaire from Higher Education National Accreditation Board (BAN-PT) and Independent Accreditation Institution (LAM), the alumni data needed is data of student ID number, year of graduation, name, email address, tax ID number, company code, study program code, telephone number, and ID number. In the questionnaire data, it is obligatory that data on employment status, have ever gotten a job or not, work location, type of company, and name of the company where they work.

In addition to personal data, mandatory data needed are position, level of work place, as well as further study questions which include sources of fees, study programs, colleges and dates of entry, sources of tuition funding funds, and the relationship between study and work. In the questionnaire, it is mandatory to also require data about the right level of education for the current job and the level of competence mastered at graduation, how much emphasis is placed on the learning methods implemented in the study program and when to start looking for work, how to find a job, how many companies they have applied for before getting a job, how many companies responded to the application, how many companies invited interviews, how active the job search was in the last four weeks, and why the job was taken if the job was not a good fit.

b. Alumni User Data Required

For a graduate user satisfaction survey, data was needed in the form of personal identification including employee ID numbers, full names with titles, names of agencies, positions, full names of alumni being assessed, and alumni positions. The assessment section of alumni includes the integrity possessed by graduates, the quality of expertise possessed by graduates, the foreign language skills possessed by graduates, the ability of graduates to use information technology, the communication skills possessed by graduates, the abilities possessed by graduates when working with a team, and the ability to develop graduates own.

c. Implementation of Tracer Study at FEB Unsoed

Circular of the Director General of Learning and Student Affairs Number 471/B/SE/VII/2017 dated 26 July 2017 concerning Implementation of Tracer Study in Higher Education states that the Ministry of Research, Technology, and Higher Education Program, in an effort to increase the relevance of higher education and the needs of the world of work, requires policies to obtain accurate national data regarding graduates from a study program who directly work through the implementation of tracer studies in every higher education.

The tracer study is carried out with the aim that; 1) Tracer studies are carried out in every higher education to ensure that standardised designs, methodologies, and questionnaires can be used for compilation and comparison of data from faculties / study programs / departments in higher educations at the national level; 2) Tracer studies carried out in each higher education as referred to in point 1 are expected to refer to design, methodology, and questionnaire standards stipulated by the Directorate General of Learning and Student Affairs of the Ministry of Research, Technology, and Higher Education as stated on the tracer study page of the Directorate General of Learning and Student Affairs of the Ministry of Research, Technology, and Higher Education pkts.belmawa.ristekdikti.go.id which has now changed to tracerstudy.kemdikbud.go.id; as well as 3) It is hoped that the results of the tracer study can be disseminated to various related parties for evaluating the performance of higher educations, and specifically to encourage improvement in the learning process in higher educations through the development of a curriculum that is relevant to the needs of the world of work. In addition, tracer study results are needed for national policy making related to higher education.

FEB Unsoed as one of the producers of graduates of course also carries out tracer study activities. Since 2021, the implementation of tracer studies at FEB Unsoed has been carried out regularly and reported in accordance with the reporting of university and ministry performance indicators in 4 quarters, namely each period in March, June, September, and December. The overall tracer study report is carried out at the end of each year. Tracer studies are carried out in 14 study programs at FEB Unsoed, namely Management Bachelor Program, Accounting Bachelor Program, Economics and Development Studies Bachelor Program, Economics Education Bachelor Program, Business Administration Diploma Program, Office Administration Diploma Program, International Business Diploma Program, Accounting Diploma Program, Master of Management Program, Master of Accounting Program, Master of Economics Program, Management Doctoral Program, Economics Doctoral Program, and Accounting

Professional Education Program (PPAK). The compilation of tracer study data from the 14 study programs is of course a source of data regarding transitions and job positions of FEB Unsoed graduates.

The results of tracer studies in higher educations are very important data because, in order to improve the quality of higher educations and related to the measurement of the higher education key performance indicators (KPI) according to the Decree of the Minister of Education and Culture Number 754 of 2020, higher education leaders must report tracer study results of alumni (tracer study) with provisions; 1) Reporting is done by the higher education operator through the website tracerstudy.kemdikbud.go.id; and 2) The results reported are tracer studies for graduates in 2021 which are carried out independently by universities.

The instrument used in Unsoed's tracer study is an instrument required by the Ministry of Education and Culture in accordance with BAN-PT and LAM standards. An online system at the university level has been developed which can be used by each faculty to track the activities of its graduates after the higher education period, both during the transition period and their movements in the world of work, via the tracer.unsoed.ac.id page. The database is at the university. Faculties or study programs can download the data through the person in charge. If there are technical problems, the person in charge of the university will help.

At present, tracer studies are considered important because they are also a tool for evaluating the performance of higher education institutions, and now they have been made one of the requirements for complete accreditation by BAN-PT as completeness in the Self-Evaluation document required in submitting proposals through the Ministry of Education and Culture. Each faculty makes a strategy in an effort to improve the quality and quantity of tracer study data, including at FEB Unsoed which always conducts socialisation activities of tracer study during the Alumni Provisioning in the four graduation periods, namely the periods of March, June, September, and December. The following is the tracer study flow at Unsoed:

Table 1 below shows that the percentage of alumni who fill each study program is still relatively small, at most 36.84%, there are even 3 study programs whose alumni have not participated in a tracer study at all. This shows that the tracer study at FEB Unsoed has not been optimally implemented and needs improvement.

The results of the analysis from this tracer study can be used as input for the faculty and the university in preparing the right curriculum and in accordance with the needs of the labour market. In 2020, Unsoed using a single instrument according to the rules of BAN-PT and LAM has implemented an online tracer system that can be accessed by all alumni via the internet. However, some alumni complained that the existing system was not easy to use and less attractive.

Table 1. Response Rate from Tracer Study at FEB Unsoed in 2022

No.	Study Programs	Number of Graduates	Number of Fillers	Percentage	Alumni Users
1	Business Administration Diploma Program	53	3	5,66	
2	Office Administration Diploma Program	53	3	5,66	
3	International Business Diploma Program	51	0	0	
4	Accounting Diploma Program	60	1	1,67	

No.	Study Programs	Number of Graduates	Number of Fillers	Percentage	Alumni Users
5	Economics and Development Studies Bachelor Program	166	80	48,19	
6	Management Bachelor Program	109	24	22,02	
7	Accounting Bachelor Program	96	22	22,92	
8	Economics Education Bachelor Program	44	10	22,73	
9	Master of Economics Program	6	3	50	
10	Master of Management Program	54	19	35,19	
11	Master of Accounting Program	16	0	0	
12	Economics Doctoral Program	1	0	0	
13	Management Doctoral Program	5	5	60	
14	Accounting Professional Education Program	19	7	36,84	

5. Conclusion and Implications

Based on the research results, it was concluded that tracer studies conducted by FEB Unsoed have been routine since 2020 using a single instrument in accordance with BAN-PT and LAM criteria. However, the response rate and quality of incoming data have not met expectations, and some study programs have even failed to trace their alumni. The data needed is data about alumni profiles and employment status as well as questions related to the teaching and learning process at FEB Unsoed and the skills acquired before and after graduation. In the survey of alumni users, the data needed is the user's assessment of alumni skills, such as mastery of foreign languages, ethics, leadership, mastery of technology, and others. Based on data analysis, the response rate of the tracer study conducted at FEB Unsoed is still not optimal, there are still many alumni who have not participated in tracer study activities. Based on the research results, the implication of this research is that FEB Unsoed needs to dig deeper into the causes of the low alumni response rate in participating in tracer studies.

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