

Relevance of Engineering Faculty Universitas Negeri Surabaya Graduates in Getting Decent Jobs

Muamar Zainul Arif ^{1,*} Wahyu Dwi Kurniawan¹ Wahyu Dwi Mulyono¹
Yuli Sutoto Nugroho¹

¹ Faculty of Engineering, Universitas Negeri Surabaya, Surabaya, Indonesia

*Corresponding author. Email: muamararif@unesa.ac.id

ABSTRACT

This study aims to determine the level of relevance of graduates in getting a decent job. This type of research is descriptive quantitative. The variables studied included the level of closeness of the field of study with work, the same level of education with job needs, and alumni income. The number of respondents was 281 from a total of 628 alumni in 2018. The results in this study (1) the level of closeness between the field of study and alumni work is very close to 44% and close to 19% (2) Current alumni work requires the same level of education as 74.87%. (3) Monthly income from alumni is following East Java UMR. This proves that FT Unesa graduates are very relevant in getting a decent job

Keywords: *relevance, FT Unesa graduate, decent job.*

1. INTRODUCTION

The success of university graduates (PT) in getting decent jobs is one of the main indicators in the KPI that has been set by the ministry of education and culture. Thus, universities are responsible not only for equipping graduates with certain competencies (learning outputs) but also for facilitating and bridging graduates to enter the world of work.

The problem experienced by universities and the industrial world is that there is a gap between the outcomes of higher education and the need for competence in the world of work. The occurrence of various fundamental changes in terms of qualifications, competencies, and requirements to enter the world of work is caused by the development of science and technology.

One indicator of the success of educational institutions is the ability to produce competitive alumni. In addition, the relevance factor is an important measure of the success of education in higher education. Conformity between the knowledge taught in lectures with the needs of the world of work is very much needed. So that the role of higher education as a provider of labor for companies can be by the required qualifications.

The relevance of education is the level of linkage between program goals and outputs in terms of normative

ideals supported by the accuracy of input, process, and output elements.

The relevance of higher education for students is related to graduates who will adjust to and participate in the world of work later. According to Bowman MJ in Tritjahjo [1]: 1) relevance is a multidimensional cognitive concept whose meaning is largely dependent on uses perceptions of information and their information needs information, 2) relevance is an adynamic concept that depends on users judgments of the quality of relationships between information need at a certain point in time, 3) relevance is a complex but systemic and measurable concept if approached conceptually and operationally from a user's perspective.

Relevance concerns two dimensions of life, namely in college and the world of work. The relevance of graduates can be related to the level of compatibility of education with alumni's work, the relevance/conformity can be shown by the closeness of the study program to the field of work, the appropriate level of education, and the level of income/salary and competence that supports the work of alumni.

According to [2] relevance is an important component because it is a factor that determines the existence of universities. Universities are said to be relevant if their alumni are quickly absorbed by jobs that are by their fields. Because the absorption of alumni depends on the

quality of graduates who are built from the integration of skills, knowledge, and abilities of alumni.

The Faculty of Engineering, Universitas Negeri Surabaya (FT Unesa) as an institution providing higher education seeks to produce competent graduates according to the needs of the world of work. These competencies can be measured from educational outcomes, educational outputs, educational processes, and educational inputs. From these various things, it will be possible to formulate steps towards the future development of FT Unesa.

The availability of alumni data is very important to evaluate the learning that has been carried out. One of the empirical studies that are expected to provide information to evaluate educational outcomes at FT Unesa is a tracer study of alumni. The information provided in the tracer study can be used for further development in ensuring the quality of education.

Tracer study is a study of tracer traces of graduates/alumni conducted 2 (two) years after graduation and aims to determine educational outcomes in the form of transition from higher education to the world of work, recent work situations, alignment, and application of competencies in the world of work. Tracer studies can also provide information on educational outputs, namely self-assessment of mastery and acquisition of competencies, the educational process in the form of evaluation of the learning process, and the contribution of higher education to competency acquisition and educational input in the form of further exploration of the socio-biographical information of graduates. Tracer studies can provide information to evaluate the results of higher education and can then be used to improve and guarantee the quality of the higher education institution concerned.

Tracer studies are carried out continuously and continuously so that information or the whereabouts of alumni can be known periodically by an institution or study program. The purpose of the tracer study is to obtain information about, 1) the time and process of getting a job, 2) the waiting time required (before and after graduation) to get a job; 3) the current condition of alumni (working/entrepreneurial/currently studying); 4) the suitability of graduates' competencies with the field of work; 5) the amount of salary obtained from the main and additional work is more than 1.2x the UMR in the area; 6) the suitability of the scientific field obtained with the alumni's field of work; 7) the contribution of universities in helping graduates to get jobs.

The benefits of a tracer study are obtaining information about 1) the gap between the competence of graduates and the demands of the real needs of graduate users so that efforts can be made to improve the curriculum, improve the quality of teachers, and adjust and improve the learning system; 2) additional (non-

academic) competencies that must be given to graduates following the competencies needed in the world of work. The results obtained through the tracer study are used as a basis for reference for thinking and policymaking for the development of education at Unesa as a step to anticipate and adapt to the development of the world of work and the business world in the future.

Currently, Unesa has an integrated web-based system for tracer study activities, tracer study results can be accessed and utilized by universities to study programs to obtain graduate data. The number of FT Unesa graduates is 628 alumni and who have filled in the Unesa web tracer study as many as 281 alumni. The tracer data is then used as a reference to find out the relevance of graduates in getting a decent job.

2. METHODS

This research is quantitative descriptive research through a survey approach. The research implementation includes the following 3 steps 1) Preparation; 2) implementation; 3) analysis.



Figure 1 Research design.

The research subjects were 628 FT Unesa alumni who graduated in 2018. The sample of this study was 281 FT Unesa alumni. Data collection techniques using a questionnaire in the Unesa web tracer study. Data analysis used quantitative descriptive techniques.

This study aims to describe the relevance of FT Unesa graduates in getting a decent job. Variables include: 1) gender and age 2) type of work, 3) suitability of work with the field of study 4) first and current income obtained 5) waiting period in getting a job 6) study period 7).

3. RESULTS AND DISCUSSION

Respondents from this study were FT Unesa alumni who graduated in 2018 with a total of 281 alumni respondents from a total of 628 alumni. Data on alumni and respondents can be seen in Table 1.

Table 1 Number of respondents and alumni.

Major	Alumni	Respon- dents	% Respon- dents
Electrical Engineering	119	54	45.38
Mechanical Engineering	131	53	40.46
Civil Engineering	173	81	46.82
PKK	130	67	51.54
Technical Information	75	26	34.67
Amount	628	281	44.75

Based on Table 1 above, the largest research respondents were from the PKK Engineering major, 51.54%. Then the second largest respondent is from Civil Engineering with 46.82%. After that 45.38% Electrical Engineering, 40.46% Mechanical Engineering. And from Informatics Engineering by 34.75%.

Most of the Unesa FT students who have graduated from their education level choose to directly enter the world of work. Through research data, it is known that quite a several alumni respondents have been looking for work even before graduation. Surely this is a very good point which will reduce the waiting time for students to get a job when they graduate. Table 2 shows the large proportion of respondents who have been looking for work before graduating, only looking for work after graduation, or even not looking for work.

Table 2 Graduate job search time.

Time	Frequency	Percentage
Before graduation	140	49.6
After graduate	106	37.6
Not looking for a job	35	12.8

Based on table 2 above, the time when alumni start looking for work is mostly done before graduation, which is 49.6%, this shows that FT Unesa alumni hope to be able to work soon. For 37.6% of alumni looking for work after graduation, this is because alumni want to complete various administrative needs that are left behind, move and adjust to new residence locations, especially for those who come from or want to work outside the city, or maybe some graduates want to take a break. before entering the world of work. Meanwhile, 12.8% of alumni who are not looking for work are entrepreneurial students and want to continue their studies.

The job search process carried out by alumni certainly produces results with the acceptance of alumni respondents in their first jobs. Of the many alumni respondents who were netted, most of the alumni are known to have just gotten a job after graduating from their education level with the proportions shown in Table 3.

Table 3 Time to get the first job.

Category	Percentage	Average(month)
Before graduation	46.4	5.1
After graduate	53.6	4.2

Getting a job is one of the goals, which of course someone who has completed the study period wants to achieve. However, in each process, work is not always obtained quickly. Many people need waiting time, to get their first job. Based on table 3 alumni get a job before graduating as much as 46.4% with an average waiting period of 5.1 months. 53.6% of alumni get their first job after graduation with an average waiting period of 4.2 months. The data above shows that most alumni get their first job after graduating because the alumni have received graduation documents.

FT Unesa alumni work in various fields of work. The selection of the current occupation can be based on the origin of the alumni's field of study, interests, aspirations, and goals of each alumni. Ideally, the work carried out by alumni is related to the field of science that they are engaged in while studying so that the knowledge they gain can be used in work, but in reality, sometimes the interests of students or alumni are different from the education they take. Figure 2 below shows data regarding the level of closeness of alumni's current work to the field of study taken by alumni while undergoing their education at FT Unesa.

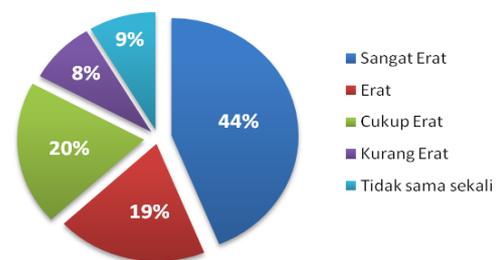


Figure 2 The closeness of the field of study with current work.

Based on Figure 2, the alumni of the Faculty of Engineering, Universitas Negeri Surabaya who have found work, have a close relationship between the fields of study that have been taken in lectures and the work they are currently doing, as much as 44%, respondents

assess between the fields of study that have been taken in lectures and the work they are doing. lived in this moment is very close. There are 19% feel that the closeness between the fields of study that have been taken in lectures and the work being undertaken at this time is close, while as many as 20% consider that there is a fairly close relationship between the fields of study that have been taken in lectures and the work being undertaken at this time. There are 8% of alumni who rate it less closely, and the rest consider it does not close at all as much as 9%.

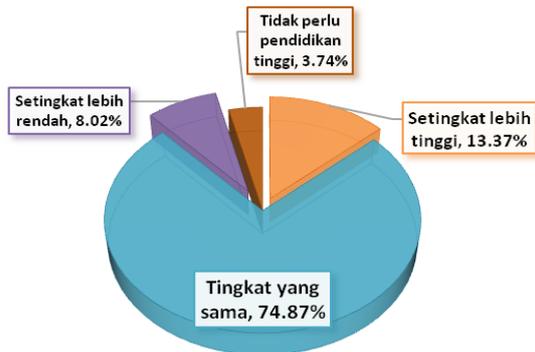


Figure 3 The closeness of the field of study with current work.

Based on Figure 3, the alumni of the Faculty of Engineering, Universitas Negeri Surabaya, in getting the current job, have different levels of accuracy between their current job position and the level of education that has been taken. There are 3.74%, alumni jobs currently require a lower level of education, 8.02%, alumni jobs require a higher level of education. The data also shows that 13.37% of alumni's current job requires a higher level of education, while 74.87% of alumni said their current job requires the same level of education. This indicates that the majority of alumni jobs today require a level of education equivalent to higher education.

Table 4 Monthly alumni income.

Income	Respondent	Percentage
0-1,000,000	8.7	24
1,000,001 - 2,500,000	27.5	77
2,500,001 - 5,000,000	54.4	154
5,000,001 - 100,000,000	9.4	26
Amount	281	100

Based on table 4, alumni work income every month with a range of 0-1 million is 8.7%, income with a range of 1-2,5 million per month is 27.5%. For the monthly salary range of 2.5-5 million, 54.4%, while the salary range for 5-10 million is 9.4%. From these data, it can be shown that the salary of FT Unesa graduates.

Based on table 4 data, the average minimum main income earned by FT Unesa graduates is Rp. 2,500,000-5,000,000, - this is inseparable from the assumption that the salary/wages provided by graduate users also consider career paths and are following the East Java UMR.

4. CONCLUSION

Based on the description above, it can be concluded as follows. (1) the degree of closeness between the field of study and the work of alumni is very close to 44% and close to 19%. (2) Current alumni jobs require the same level of education of 74.87%. (3) Monthly income from alumni is by East Java UMR.

The results obtained from this study only discuss the relevance of graduates in getting a decent job. Meanwhile, several other factors also need to be assessed, such as skills in work, criteria for private/government workplaces. National or international level company. For this reason, it is recommended that further research is needed.

ACKNOWLEDGMENT

Acknowledgments to the Faculty of Engineering, State University of Surabaya, which provided funding for this research, as well as to alumni who are willing to be respondents in this research.

REFERENCES

- [1] Arianto Leman, dkk. Profil dan Relevansi Lulusan Jurusan Pendidikan Teknik Mesin Dengan Kebutuhan Kerja. *Jurnal Penelitian Pendidikan Paedagogia* Vol. 20 No. 1, Februari Tahun 2017. (Hal 61-77)
- [2] Bungin, 2005. *Metodologi Penelitian Kuantitatif*. Jakarta: Kencana Prenada Media Group.
- [3] Satuan Career Center. 2021. *Buku Pedoman Tracer Study Univeversitas Negeri Surabaya*
- [4] Sugiyono. 2012. *Metode Kualitatif dalam Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung : Alfabeta
- [5] Tim Penyusun. 2008. *Kamus Besar Bahasa Indonesia Edisi Ke Enam Belas*. Jakarta : Balai Pustaka
- [6] Yohanes Sutrisno, dkk. Kompetensi Mahasiswa Jurusan Teknik Mesin dan Relevansi dengan Dunia Kerja. *Journal of Mechanical Engineering Education*, Vol. 5, No. 1, Juni 2018, (Hal.119-123)
- [7] S. Bagale, *Technical Education and Vocational Training for Sustainable Development*, J. Train. Dev., vol. 1, no. 1, pp. 15–20, 2015.

- [8] C. C. Chinedu, W. A. Wan Mohamed, and A. O. Ajah, A Systematic Review on Education for Sustainable Development : Enhancing TVE Teacher Training, *J. Tech. Educ. Train.*, vol. 10, no. 1, pp. 109–125, 2018.
- [9] A. Miller, Development through vocational education. The lived experiences of young people at a vocational education, training restaurant in Siem Reap, Cambodia, *Heliyon*, vol. 6, no. November, pp. 1–10, 2020, doi: 10.1016/j.heliyon.2020.e05765.
- [10] M. Pavlova, *Technology and Vocational Education for Sustainable Development*. Queensland: Springer, 2009.
- [11] S. Billet, *Vocational Education Purposes, Traditions and Prospects*. London: Springer Science Business Media, 2011.
- [12] Samrin, Pendidikan Karakter (Sebuah Pendekatan Nilai), *J. Al-Ta'dib*, vol. 9, no. 1, pp. 120–143, 2016.
- [13] J. Anglim, V. Sojo, L. J. Ashford, A. Newman, and A. Marty, Predicting Employee Attitudes to Workplace Diversity from Personality, Values, and Cognitive Ability, *J. Res. Pers.*, vol. 83, pp. 1–14, 2019, doi: 10.1016/j.jrp.2019.103865.
- [14] M. J. Kim, M. Bonn, C. K. Lee, and J. S. Kim, Effects of employees ' personality and attachment on job flow experience relevant to organizational commitment and consumer-oriented behavior, *J. Hosp. Tour. Manag.*, vol. 41, pp. 156–170, 2019, doi: 10.1016/j.jhtm.2019.09.010.
- [15] Zubaedi, *Desain Pendidikan Karakter Konsepsi dan Aplikasinya dalam Lembaga Pendidikan*. Jakarta: Kencana, 2013.
- [16] Suyanto, Karakter Kunci Sukses Hadapi Revolusi Industri 4.0, *suyanto.id*, 2020. <https://suyanto.id/karakter-kunci-sukses-hadapi-revolusi-industri-4-0/> (accessed Jun. 06, 2021).
- [17] Job Outlook, The Attributes Employers Want to See on New College Graduates' Resumes, *naceweb.org*, 2016. <https://www.naceweb.org/career-development/trends-and-predictions/job-outlook-2016-attributes-employers-want-to-see-on-new-college-graduates-resumes/>.
- [18] I. K. Sudarsana, Pengaruh Karakter Individu dan Persepsi Keadilan pada Kinerja Karyawan (Studi Kasus pada Hotel di Kota Denpasar), *J. Ilm. Hosp. Manag.*, vol. 7, no. 2, pp. 101–110, 2017.
- [19] An Economist Intelegnce Unit, *Driving the skills agenda : Preparing students for the future*. 2015.