# Tracer Study Holders of Competency Certificate of LSP Unesa

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**Abstract.** Tracer study which is a form of survey to LSP Unesa which organizes competency certificates that have strategic value for the development of higher education. The results of this tracer study activity can be used to evaluate the LSP that provides competency certificates to students. To find out the competencies possessed by alumni and their application in the business/industry world, LSP needs to conduct graduate tracking or tracer study. The purpose of the tracer study here is to obtain information about the distribution of graduates, graduate activities, positions and roles held by graduates in society, the industrial world, or related certificates. The research method used in this graduate tracking is descriptive quantitative through the distribution of questionnaires. As a Professional Certification Institution that has received a license from the National Professional Certification Agency since November 16, 2015, the task of the Surabaya State University Professional Certification Institution (LSP Unesa) is to carry out student competency tests in the Unesa environment. LSP UNESA which has a scope of Engineering, Beauty, Accounting, and Psychology with the support of professional associations, industries, and institutions in each of these fields understands the need for professional workers very well. Currently, there are approximately 15 competency test schemes at LSP Unesa, while the number of Unesa graduates who have competency certificates in 2023 is 63 people, each of whom has a certificate according to the competency test scheme at the LSP. Information data related to graduates with competency certificates in 2023 who already have jobs and the length of the waiting period to get a job is still not available. Therefore, the results of a tracer study are also needed to support this research. This research was conducted quantitatively using a validated questionnaire to obtain appropriate data. The results of the questionnaire were then processed and analyzed. The questionnaire instrument was taken online via an online-based Google form, which makes it easier for researchers without having to visit potential respondents. This data analysis technique is by means of data reduction, data presentation and drawing conclusions. The results obtained from this study include 74.87% of competency certificate holders have obtained jobs that are in accordance with their fields while the remaining 25.13% chose jobs that are not in accordance with their certification fields.

**Keywords:** tracer study, holder of competency certificate, LSP UNESA, online.

# 1    Introduction

In line with the development of time and technology, all aspects of life, including those affecting the general public, have undergone changes. This is also true in the field of education, where the orientation has shifted from knowledge for personal development to knowledge for the benefit of society. The success of university graduates becomes a benchmark for the university's success in educating its students, shaping skills and character that can contribute positively to the nation of Indonesia. Therefore, universities have a responsibility to facilitate and bridge the transition of graduates into the professional business and industrial world.

Considering that graduates are university products who interact directly with the community in the world of work [1]. The quality of graduates in a university can be improved by approaching alumni to get feedback so that the university can evaluate the learning activities in it [2]. Universities have an important role in preparing their graduates to become reliable experts. Therefore, feedback is needed from alumni, the community, and stakeholders related to learning activities at universities [3].

One-way universities contribute to equipping their alumni is through certification programs. This has also been implemented by Universitas Negeri Surabaya (Unesa), which participates in producing competent workers by involving the Professional Certification Institute of Universitas Negeri Surabaya (LSP Unesa) in conducting competency tests for prospective graduates. The hope is that the competency certificates obtained by alumni will make it easier for them to find jobs and serve as recognition of their competencies. With these competency certificates, industries will have greater confidence in the skills of Unesa alumni.

However, in Indonesia, not many universities have a traceable record of their graduates. This condition results in almost no feedback from graduates to improve the quality of education at the universities themselves. The feedback provided by alumni can generally be beneficial in helping universities, especially Unesa, improve the system, education management, and competency certification.

One method that can be used to assist universities in making improvements is through conducting a Tracer Study. This is very important to do considering that alumni tracer studies have become one of the requirements for university accreditation [4]. Through alumni tracers, a university can monitor the activities of its alumni by conducting surveys or distributing questionnaires to its alumni [5]. The distribution of the questionnaire to alumni or graduates can be done by utilizing technology, namely by using email, mailing lists, and others [6].

Tracer studies allow universities to obtain comprehensive information about their graduates. This information relates to everything from the transition period when leaving college until they get a job to their performance when carrying out their work [7]. Information from graduates through tracer studies can provide valuable information in supporting educational progress and evaluation process at universities [8,9], especially Unesa and LSP Unesa in particular, and can subsequently be used to refine and assure the quality of LSP Unesa.

This Tracer Study will focus specifically on the implementation of certification activities conducted by LSP Unesa, examining whether the competency certificates are useful and align with industry needs, and whether additional competency schemes are needed to enhance alumni performance in their careers. The most dominant concern

that has developed is related to the mismatch between the competency certificates held by graduates and the demands of the world of work [10]. Furthermore, the Tracer Study will enable LSP Unesa to assess the success of certificate-holding alumni in their careers, considering factors such as waiting time, type of company, job status, position, and income.

The Tracer Study is also valuable in providing crucial information about the relationship between LSP Unesa and the professional work environment, assessing the relevance of LSP Unesa for stakeholders, and fulfilling the requirements for LSP Unesa's licensing. The Tracer Study should be conducted by an institution that bridges LSP Unesa with the business and industrial world. It must be carried out in an institutionalized, structured manner with appropriate methodologies and analyses to obtain measurable, accurate, and comparable results. The results of this Tracer Study can also serve as input for Unesa in developing a curriculum that is more aligned with competency standards and integrated with the competency testing activities conducted by LSP Unesa.

LSP Unesa hopes that the research titled "Tracer Study Holders of Competency Certificate of the Professional Certification Institute (LSP) Universitas Negeri Surabaya" can serve as a basis for mapping and updating the existing competency schemes at LSP, as well as for the development of Competency Test Materials (MUK) and the implementation of competency tests in each scheme.

## 2      Methods

This research employs a survey method with a descriptive quantitative approach aimed at collecting and presenting facts about the demographics of Unesa graduates who hold competency certificates from LSP Unesa. This study also investigates alumni perceptions regarding the impact of the competency certificates on their employment. Additionally, the research explores information related to the potential additions or improvements that need to be made by LSP Unesa. Fig. 1 illustrates the general flow of the research activities.

**INSTRUMENTS**
The research team will develop a tracer study instrument based on the competency assessment activities previously conducted. This instrument will consist of at least three sections: general information about alumni holding competency certificates, alumni employment data, and an evaluation of the certification activities at LSP Unesa, as well as the learning process in the study programs related to the competency assessments.

**DATA COLLECTION**
To collect data from graduates holding competency certificates, this study will utilize a tracer study instrument. The instrument will be distributed via a link sent to the registered email addresses of alumni.

**DATA ANALYSIS TECHNIQUE**
The data obtained from the survey will be processed descriptively to provide information about the condition of alumni holding competency certificates and their

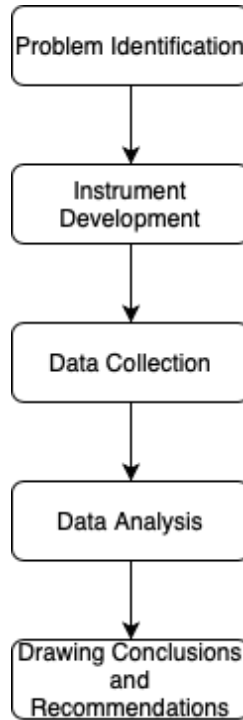expectations regarding future competency assessment activities organized by LSP Unesa.



**Fig. 1.** Research Flowchart

**DRAWING CONCLUSION AND RECOMENDATIONS**
In the final stage of this research, conclusions and recommendations will be drawn based on the analysis of the tracer study survey results for LSP Unesa.

## 3    Results

The research team confirmed with certificate holders by distributing questionnaires online to collect tracking data for competency certificate holders in 2023. The results of the questionnaire distribution can be seen in Table 1.

Based on table 1, the type of competency scheme "occupation" has a higher percentage of job suitability than the competency scheme of the "cluster" type. Holders of competency certificates of the "occupation" scheme type have a percentage of 75.58 percent in obtaining jobs that are in accordance with the certification that has been carried out while the remaining 24.42 percent obtain jobs outside the field of the

competency scheme they have. This percentage is about 5.2 percent from the percentage achieved by the "cluster" type competency scheme. This is indicated by 70.37 percent of holders of competency certificates of the "cluster" type obtaining jobs that are in accordance with the competency scheme they have followed while the remaining 29.64 percent do not obtain such jobs.

Comparison of the number of holders of competency certificates of the "occupation" and "cluster" types can be seen in Fig. 2. Holders of competency certificates of the "occupation" type contribute 130 people who have jobs that match their competency certificates, while the remaining 19 people do not get jobs that match their certificates. Holders of competency certificates of the "cluster" type consist of 42 people who get jobs that match their certificates, while the remaining 8 people do not.

**Table 1.** Suitability of Work with Competency Certificate Held Based on Schema Types

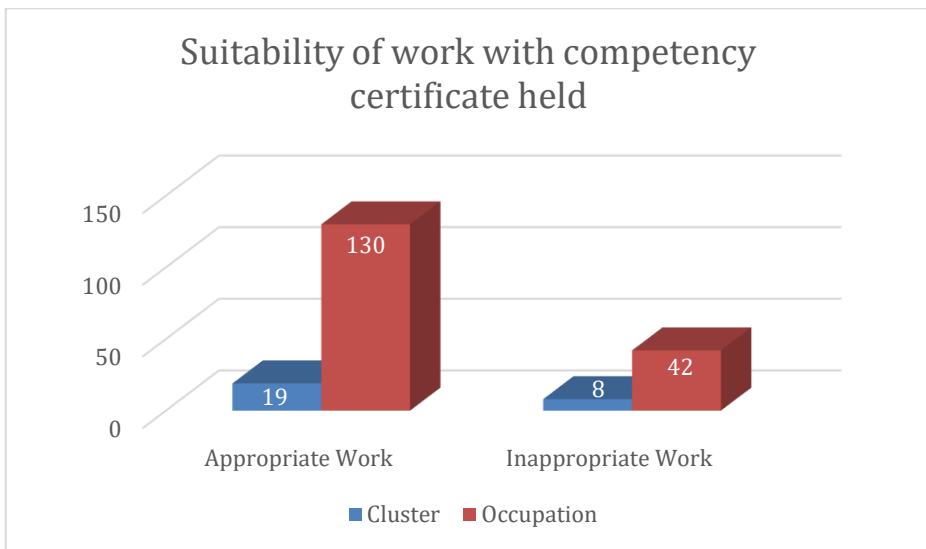| Schema Types | Appropriate Work | Inappropriate Work | Percentage of Appropriate Work (%) | Percentage of Inappropriate Work (%) | Amount |
|---|---|---|---|---|---|
| Cluster | 19 | 8 | 70,37 | 29,63 | 27 |
| Occupation | 130 | 42 | 75,58 | 24,42 | 172 |
| Total | 149 | 50 | 74,87 | 25,13 | 199 |



**Fig. 2.** Suitability of Work with Competency Certificate Held

Table 2 discusses the distribution of several competency certificate holders who have obtained jobs in accordance with the certificates they hold. If we review the competency certificates based on the scheme name, we will find that the holders of competency certificates with the Operational Marketing (Sales) scheme are the most advantaged in obtaining employment in the field stated in their competency certificate. This can be seen from the table, that 100 percent of certificate holders have obtained appropriate jobs and in the same field as the certification scheme that has been

implemented. In addition, the lowest percentage (42,11 percent) was obtained from the community empowerment facilitator scheme. Many of the certificate holders chose to work outside the field of certification that had been carried out.

**Table 2.** Suitability of Work with Competency Certificate Held Based on Schema Names

| Schema Names | Appropriate Work | Inappropriate Work | Percentage of Appropriate Work (%) | Percentage of Inappropriate Work (%) | Amount |
|---|---|---|---|---|---|
| Designer Assistan | 4 | 1 | 80 | 20 | 5 |
| Kids/Women/Men Fashion Designer | 2 | 1 | 66,67 | 33,33 | 3 |
| Young Graphic Designer | 26 | 4 | 86,67 | 13,33 | 30 |
| Community Empowerment Facilitator | 16 | 22 | 42,11 | 57,89 | 38 |
| Junior Web Programmer | 12 | 2 | 85,71 | 14,29 | 14 |
| Lead Computer Operator | 47 | 5 | 90,38 | 9,62 | 52 |
| Wastewater Treatment | 19 | 9 | 67,86 | 32,14 | 28 |
| Expert Accounting Technician | 4 | 3 | 57,14 | 42,86 | 7 |
| Intermediate Accounting Technician | 10 | 2 | 83,33 | 16,67 | 12 |
| Junior Computer Network Technician | 4 | 1 | 80 | 20 | 5 |
| Operational Marketing (Sales) | 5 | 0 | 100 | 0 | 5 |
| Total | 149 | 50 | 74,87 | 25,13 | 199 |

The distribution of the percentage of job suitability by each competency certificate holder based on their respective scheme names can be seen in Fig. 3. Each competency certification scheme contributes its own percentage value. From Fig. 3, we get the same results as in Table 2. The largest percentage (100%) is contributed by the Operational Marketing (Sales) scheme while the lowest percentage (42.11%) is obtained from the Community Empowerment Facilitator. This is a concern for the LSP, especially in schemes that have a low percentage. The LSP can discuss with the academic division, study program, assessor, scheme developer related to the schemes regarding this matter and seek a joint solution.
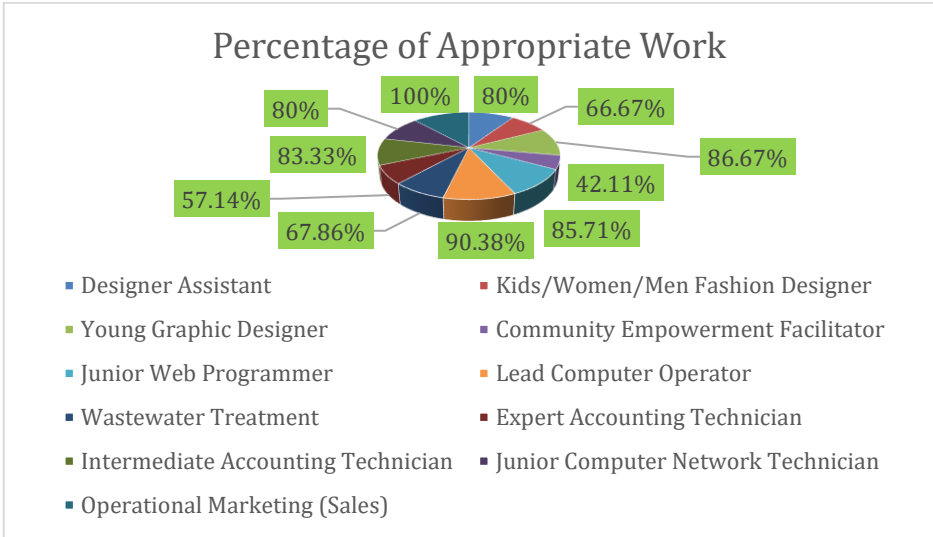
**Fig. 3.** Suitability of Work with Competency Certificate Held

## 4    Conclusion

The suitability between the competency certificates held by unesa alumni and the jobs they get is something that needs to be known and followed up. This study tries to answer this need through several surveys that have been conducted. The research team has distributed questionnaires to alumni certificate holders related to the jobs they have now done. The results obtained from this study include 74.87% of competency certificate holders have obtained jobs that are in accordance with their fields while the remaining 25.13% chose jobs that are not in accordance with their certification fields. This is reinforced by the type of certification scheme that is "occupation" capable of bringing alumni in getting jobs that are in accordance with their fields rather than the "cluster" certification scheme. Furthermore, all competency certificate holders in the Operational Marketing (Sales) certification scheme have obtained jobs that are in accordance with their fields while competency certificate holders in the Community Empowerment Facilitator scheme still need to be followed up regarding the reasons for them choosing jobs that are not in accordance with the scheme.

Further research can discuss the root causes of certificate holders who decide to choose jobs outside their competence. This requires further study so that after the cause is found, research can be continued to find a solution so that Unesa students can always be on the right track in achieving their competence and proving it in certification until they obtain a certificate of competence and are able to apply it in work that is in accordance with that competence

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