



Training On Making Tracer Studies For Teachers At Madrasah Aliyah

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Abstract. This community service initiative is motivated by the limitations teachers face in evaluating the curriculum and understanding the successes and obstacles of graduates (alumni). Schools find it challenging to identify weaknesses in their education system. This results in non-objective evaluations of educational quality, making it difficult to implement improvements and development efforts. Additionally, schools lack a holistic understanding of alumni achievements and career development. This creates limitations for policy-makers in assessing the effectiveness of education and making necessary curriculum adjustments to meet the actual needs of the job market. The purpose of this community service is to enable teachers and their teams to create and utilize alumni tracer studies. Specific targets include helping teachers understand the urgency of the program and equipping them with the skills to create and administer tracer study data. The methods used in implementing the community service include educational discussions and case studies. The training has succeeded in increasing the capacity of teachers in managing tracer studies and follow-up efforts are discussed further.

Keywords: Tracer Studies, Curriculum Evaluation, Alumni Achievements, Educational Quality, Career Development.

1 Introduction

Over time, there have been significant changes in professional needs and job market demands. To address this, various educational institutions, including Islamic educational institutions such as Islamic boarding schools, have begun to initiate new programs to develop students' learning interests and meet job market needs. One initiative that is being proposed is an intensive modern Arabic language program. Although this program has many advantages, there are still several issues that need to be addressed. One of the issues faced by institutions is related to the development of educational quality. In addition, there are also limitations in mapping career directions for alumni [1]. There are still obstacles in understanding the real impact of the education

provided, as well as limitations in involving alumni in the development of Islamic boarding schools [2, 3]. By identifying these issues, educational institutions can take strategic steps to improve the effectiveness of programs and ensure that can meet the challenges faced by students and alumni in the job market.

There are several ways schools can evaluate the quality of education. One way is to update the educational process through data collected from graduate feedback [4]. This information is used to improve learning methods, the curriculum, and school policies [5]. Additionally, by understanding the career paths and successes of previous graduates, schools can provide better guidance to students in choosing their future studies and developing the appropriate skills [6]. Educational institutions also need to understand the current job market requirements and potential job opportunities [7]. The next step is to adjust the curriculum to make it more relevant and prepare students to enter the workforce [8].

One way to identify the successes and challenges faced by alumni is through conducting a tracer study. A tracer study involves monitoring and evaluating the career trajectories of alumni, including their job search experiences, work situations, and the application of knowledge gained during their education [9]. The purpose of implementing a tracer study is to measure the effectiveness of the educational program by assessing the success of alumni in the workforce. Additionally, it helps educational institutions improve the learning process and enhance curriculum relevance [10].

Some secondary education institutions, such as high schools, vocational schools, and madrasas, do not have tracer study programs. This lack can significantly impact the understanding and condition of alumni. Without a tracer study, institutions lose the opportunity to systematically track the career paths and successes of their alumni after completing their education at Islamic boarding schools. The consequences include limited understanding of alumni achievements and contributions, challenges in assessing the effectiveness of education, and difficulties in adapting the curriculum to meet the actual needs of the job market [11]. As a result, institutions struggle to provide effective career guidance to students, which can influence students' career decisions and their readiness to face future challenges [12]. Therefore, implementing a tracer study program in educational institutions is a strategic step to obtain more in-depth information regarding alumni contributions and to improve the quality of education within the institutions [13].

Teachers and administrators of educational institutions often do not understand the urgency of implementing a tracer study program. There is a lack of understanding and utilization of tracer study data to provide valuable insights for improving the curriculum and learning processes. This issue can be addressed through targeted education and training for teachers. Training programs should include an in-depth understanding of tracer study concepts, guidance on how to design and implement tracer studies, and techniques for data collection and management. The goal is for teachers to grasp the urgency and benefits of tracer studies, enabling them to use this data effectively to enhance educational quality.

Furthermore, the limited understanding of the urgency of the tracer study program has resulted in the unavailability of such studies in many educational institutions. Additional challenges include limited resources and a lack of technical expertise in implementing the program. Therefore, it is essential to establish a dedicated program and form a team responsible for executing the tracer study initiative. To overcome these

problems, educational institutions need to initiate tracer studies as part of their efforts to enhance educational quality. As a first step, institutions should organize training programs on conducting tracer studies and collaborate with experts at universities to provide teachers with direct in-sights into the importance of such studies. Additionally, implementing practical skills training programs can help bridge gaps and further improve the quality of education.

2 Methods

This community service project adopted a participatory approach, actively in-volving the participants—teachers from Madrasah Aliyah—in every phase of the training. The project design incorporated both theoretical and practical components, facilitating participants' comprehension of fundamental tracer study concepts and their direct application in developing and executing such studies.

The criteria for selecting the partner institution included the absence of existing tracer study data. Consequently, MA Al-Khoirot in Malang Regency was selected as the partner institution. A thorough needs assessment and discussions with the partner institution revealed a critical issue: the lack of a tracer study and a dedicated tracer team.

The community service activity was carried out in several phases as follows:

a. Preparation: Training materials were developed based on case analysis and literature review. The content was aligned with identified needs and current re-search findings. The preparation phase included: (1) the development of training materials covering definitions, objectives, benefits, implementation, and challenges of tracer studies; (2) the creation of foundational tracer study instruments (to be further developed by the tracer management team); (3) co-ordination with partners regarding the schedule and location of the training; and (4) dissemination of information about the training to participants.

b. Implementation: An intensive outreach program was conducted to explain the concepts, objectives, and benefits of tracer studies. Specialized training sessions were held to provide teachers with a comprehensive understanding of how to implement tracer studies. The team also encouraged institutions to integrate tracer studies as a fundamental component of their educational evaluation systems.

c. Results and Evaluation: Teacher satisfaction was surveyed, and the implementation of tracer studies was monitored. The team was able to track the steps taken in the tracer study program and assess its impact on educational quality.

The training session comprised 15 male teachers with an average age of 28.5 years ($SD = 8.46$). Among the participants, 20% held master's degrees, while 80% had bachelor's degrees. The average duration of work/teaching experience was 5.23 years. The training was conducted in June 2024. A satisfaction scale was employed to evaluate the effectiveness and utility of the training. Satisfaction data were analyzed using descriptive statistical techniques to identify trends.

In addition to assessing training satisfaction, a key success indicator was the establishment of a tracer study managed by the newly formed tracer team. The entire training process was documented through a video recording and a news article, serving

both as evidence of the conducted activities and as material for evaluating the community service program.

3 Results and Discussion

The training on the development of tracer studies was executed in accordance with the planned stages. The preparation phase was completed without significant obstacles. The implementation phase involved training sessions that provided both theoretical and practical content. The theoretical component elucidated that a tracer study is a form of evaluative research used to track the performance and career trajectories of graduates from an educational institution [14, 15]. Through tracer studies, institutions aim to ascertain the current status of their alumni. Key areas of interest regarding alumni include their continuation of studies and selected programs, types of employment and income levels, alignment of current employment with prior learning, perceived benefits of their education, and encountered difficulties.

Tracer studies are vital for institutions for several reasons, including the evaluation of program quality, considerations for curriculum improvement, obtaining feedback from alumni, and enhancing future employment prospects [16]. The training material included case studies illustrating the contrast between institutions that have implemented tracer studies and those that have not. Common questions and answers (Q&A) addressed during the training revealed that tracer studies are generally conducted between 6 months and 3 years post-graduation. The execution of tracer studies is typically managed by an ad hoc tracer team. The principal respondents for tracer studies are alumni and stakeholders, pre-dominantly from the business and industrial sectors (DUDI).

Subsequently, the material covered the challenges that may be encountered during the implementation of tracer studies. Several challenges were identified, including low alumni response rates due to a significant portion of the target alumni population being unresponsive to surveys and limitations in contacting and providing essential background information on the importance of feedback in tracer surveys. Data limitations may also arise, associated with the constraints and inaccuracies of tracer data, which in turn hinder comprehensive analysis. Other challenges include difficulties in determining representative sampling methods in accordance with the specified population. Additionally, the costs and resources required to conduct tracer studies present their own set of challenges, related to expenses, time, personnel (for data collection), systems and technology, as well as required skills and knowledge.

These challenges can be mitigated through a systematic approach to conducting tracer studies. The process is briefly outlined as follows: (a) preparing the survey; (b) identifying the alumni sample; (c) collecting data; (d) analyzing data; (e) reporting results; and (f) follow-up. Following the theoretical session, participants were tasked with developing survey questions specifically for tracer studies at Madrasah Aliyah and Pondok Pesantren Al-Khoirot, with a focus on formal and non-formal religious education. Discussions centered on the urgency of developing the tracer study for the partner institutions. At the end of the session, an evaluation of satisfaction and recommendations for follow-up were conducted to enhance the quality of the partner institutions.

Based on participant feedback, the content delivered was generally evaluated as both novel and comprehensive. This assessment is understandable, given that the institution had not previously conducted tracer studies for its graduates. Participants indicated that the training material was highly valuable and contributed significantly to their understanding. They reported feeling more prepared and confident to implement the tracer study that had been developed.

Furthermore, participants expressed appreciation for the practical approach adopted in the training. The content was not solely theoretical but also included practical examples and relevant case studies, which facilitated the understanding and application of tracer study concepts. Participants also noted that the training provided new insights into the importance of tracer studies for assessing alumni success and improving educational quality [17]. Consequently, the school administrators decided to establish a tracer team tasked with conducting tracer studies on alumni. Following the training, the tracer team will develop a structured work program for data collection. Descriptive analysis of training satisfaction is presented in Table 1.

Table 1. Results of descriptive analysis of training satisfaction.

Evaluation	Scale	Mean	Interpretatio
Novelty of Material	1-5	3.80	Satisfied
Benefits of Material	1-5	3.87	Satisfied
Gain additional knowledge	1-5	3.93	Satisfied
Material is easy to understand	1-5	3.93	Satisfied
Material is delivered sequentially	1-5	3.93	Satisfied
Appropriate duration of material delivery	1-5	4.00	Satisfied
Effectiveness of material delivery time	1-5	3.73	Satisfied
Clarity of the speaker in delivering the content	1-5	4.00	Satisfied
Interaction between speaker and participants	1-5	4.07	Satisfied

This training has made a substantial contribution to enhancing the capacity of teachers in partner institutions to conduct tracer studies. The improvement in understanding and technical skills in instrument development, alongside the establishment of tracer teams, serves as evidence of the training's effectiveness in addressing the identified challenges. Nevertheless, the challenges encountered indicate that continued support is necessary to ensure that tracer studies can be optimally implemented in future education policies. Strengthening technological capacity and strategies to increase alumni participation should be the focus of follow-up activities from this training.

In a broader context, the results of the tracer studies collected can provide valuable recommendations for curriculum development in partner institutions. The data on the curriculum's alignment with the needs of the job market will serve as a foundation for curriculum improvements and transformations to ensure greater relevance [18], thus better preparing graduates to face future challenges. The follow-up recommendations focus on the tracer team's limited data analysis capabilities, highlighting the need for

support in analyzing and interpreting tracer study data. This is essential to ensure that the tracer teams at partner institutions provide maximum benefits.

4 Conclusion

The community service activity concluded that teachers have developed the capacity to enhance their understanding and technical skills related to the concept, the preparation of instruments, and data collection for tracer studies. The teachers who participated in the training successfully initiated the implementation of tracer studies in their institutions. Questionnaires have been prepared and distributed to alumni, and initial data has started to be collected. The resulting tracer study is expected to become a valuable evaluation tool for curriculum development.

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