Mapping alumni at higher education for the curriculum development: A case study in Indonesia

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Article Info

Abstract

Mapping alumni in higher education is one of the foundations for developing or building a new curriculum for the Religious Education Study Program. Unfortunately, many study programs have not used the results of their alumni mapping as the basis for curriculum development in their study programs. This study has two objectives; first, to map alumni's existence in describing the graduates' profile, and second to explore the presence of alumni as the basis for developing the curriculum of the Religious Education Study Program. The method of this study is a quantitative method by using the survey model. The data were analyzed using univariate, bivariate, and multivariate analysis. The results of this study describe the profile of graduates from the Religious Education Study Program with the existence of alumni. 59.33 percent filled out the questionnaire, and 62 percent of alumni were busy with their work. Regarding the alumni distribution, about 24 percent continue their studies to masters and doctoral levels. Meanwhile, 14 percent continue with training and courses and still looking for jobs. Then, based on the geographical distribution, 53 percent are in DI Yogyakarta, and 47 percent are spread across various parts of Indonesia and overseas. However, the waiting time for graduates of less than three months to get a job is 66 percent, whereas 80 percent of the agencies working in schools are categorized as very high.

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Introduction

Mapping graduates in each study program is an obligation for study programs to measure and see the quality of success of the curriculum implemented by a study program in Higher Education. In addition, such can also evaluate the curriculum that has been applied in the study program. Therefore, a survey is needed to be related to the existence of graduates and a tracer study is needed to explore information on the whereabouts of graduates. A Tracer study is a way to track the records of graduates or graduates of a study program (Mangiduyos & Subia, 2021). Tracer Studies at European and American universities have been around since the 1970s. However, at universities in Indonesia, such have only existed since the 2000s, imposing requirements for national accreditation of study programs by the higher education accreditation body (BAN-PT) (Romadlon & Arifin, 2021).

A Tracer study is the essential part of curriculum development (Kalaw, 2019; Mangiduyos & Subia, 2021) in the study program process to determine graduate competencies in the form of attitudes, knowledge, and skills (Pang et al., 2018); Curriculum conformity with the demands of the world of work; alignment between graduate skills and alumni type of work; Market demands in the world of work and similarities with the skills designed by the study program (Abas & Imam, 2016), Certification requirements such as BAN-PT, AUN, and International Accreditation; Grant requirements based on the study program or institution.

A Tracer study is the study of college graduates who obtain information to indicate possible deficiencies in a particular study program and serves as the basis for planning future activities (Oseifuah et al., 2014; Schomburg, 2003). For information about the success of a professional career (career, status, income), a graduate needs information about the relevance of knowledge and skills (the relationship between knowledge and skills is used as a job requirement, field of work, and professional position). Graduates are asked to assess the condition of the study program and the provisions they have experienced retrospectively (evaluation in the narrow sense) (Schomburg, 2003).

The Religious Education Study Program, which was previously accredited by BAN-PT and certified by AUN-QA, will face international accreditation. A Tracer study is needed to develop the International Curriculum; Initially, in 2013 the Tracer study had expired data, so a new Tracer study was required. The demands of globalization currently exist in the economic field, IT in the socio-cultural area, and even in religion or society. As for internationally recognized study programs, in 2019, there were 27,779 active study programs throughout Indonesia (Junaidi, 2020). Study programs that have received international recognition and are internationally accredited and AUN-QA certified, account for 430 study programs, or the equivalent of 1.5 percent. There are 3,923 active study programs accredited by BAN-PT, only 11 percent of which have received international accreditation (Junaidi, 2020). Islamic Education Study Programs in Indonesia that have been AUN-QA certified number as many as 15 PAI study programs.

One way to get feedback from alumni regarding the alignment of educational outcomes and curriculum can be accepted with competencies needed in the real world of education, business, and industry (Cobb et al., 2015). Good, accurate, and structured Tracer study results can evaluate the quality of study programs, curriculum, teaching materials, and the education system. Currently, the discourse of international curriculum development is influenced by western philosophy as well as eastern philosophy. It impacts national and international ideologies, prioritizing opportunity, prosperity, and professional growth. Meanwhile, international ideology puts forward cooperation, cultural, social, and intellectual exchange for global education (Gado & Verma, 2011).

According to Malcolm Waterz, globalization is a social process that has passed all geographical boundaries imposed on social and cultural relations (Waters, 2001). People are increasingly aware of these changes (Aydin et al., 2017). Realizing a global vision requires an integrated curriculum with four dimensions of local values: intelligence, emotion, action, and morals. The international vision curriculum has four dimensions for effective design: independent, local and global, virtual and real, collaboration, and relationships (John et al., 2017; Nursalam, 2020). The higher education curriculum so far refers to the ability of the existing lecturers at the institution, and the current curriculum uses a competency-based curriculum. However, it still does not meet the expectations of stakeholders or graduate users. The needs in the field of work have not met the outcomes required by the company or agency. Therefore, alumni mapping is needed to develop a curriculum to meet the expectations of stakeholders or graduate users.

International curriculum development focuses on learning outcomes. The reconstruction of the international curriculum begins with an analysis of market and stakeholder needs, which can be seen from the review of the study program tracer above results. Learning outcomes combine and emphasize mastery of in-depth

material content with developing skills for future study and work. Studying in-depth knowledge and conceptual understanding can help students make connections between various subjects or materials, and international students must be able to take advantage of every opportunity. The university also encourages students to develop higher-order thinking skills, problem-solving, critical thinking, independent research, collaboration, and arguments. Next, analyze the development of science and expertise and formulate the body of knowledge for the religious education study program.

The preparation of an international curriculum based on the religious education study program tracer results is focused on the practice of program educational objectives (PEO) and program learning outcomes (PLO). The graduate attributes are lowered to the learning outcomes program and then reduced to learning outcomes courses (CLO) and then to lesson learning outcomes (LLO). The curriculum development of the Religious Education Study Program is a 4-year cycle that must be evaluated for its success whether the vision and mission that have been set have been achieved or not. If completed, the previous curriculum will be the basis for developing the vision and mission to a higher level. The need to take it to a higher level of internationalization requires the presence of academics and professional policymakers who can answer the challenges of the contemporary era. They must be able to direct social life, cultural institutions, centers of social interaction and discussion, and centers of intellectual activity. Moreover, academic staff must graduate from universities or study programs of international standard or that have been internationally accredited.

Based on the explanation of the problem above, this study aims to map the existence of alumni in defining the profile of graduates and explore the presence of alumni as a basis for developing the Curriculum of the Religious Education Study Program. Here formulated is the problem of the study as follows: what are the results of the alumni mapping as the basis for curriculum development for the religious education study program, and how do we explore the existence of religious education study program alumni for curriculum development?

Literature Review

Tracer Study

A Tracer study is the study of college graduates who obtain information to indicate possible deficiencies in a particular study program and serves as the basis for planning future activities (Oseifuah et al., 2014; Schomburg, 2003). For information about the success of a professional career (career, status, income), a graduate needs information about the relevance of knowledge and skills (the relationship between knowledge and skills is used as a job requirement, field of work, and professional position). Graduates are asked to assess the condition of the study program and the provisions they have experienced retrospectively (evaluation in the narrow sense) (Schomburg, 2003).

The Tracer study is a retrospective evaluation of alumni conducted after graduation (Abana et al., 2021) that provides information for evaluating higher education outcomes (Gines, 2014). Furthermore, it can improve the quality of study programs, higher education institutions, and curriculum development. Creating graduates who are reliable and competent in their fields to compete with other institutions in the world of work, a tracer study is needed (Prasetyono et al., 2021; Wale et al., 2018). Collecting feedback from graduates to map achievements and career progress and provide information about graduates.

Therefore, the evaluation survey is also intended to contribute to innovation in higher education, which must include processes to help explain the outputs. When analyzing university output, there are four methods of collecting information data: (1) direct measurement, (2) indicators based on available information, (3) participant survey, and (4) expert judgment. A Tracer Study is a way to track the records of graduates or graduates of a study program (Mangiduyos & Subia, 2021). Tracer Studies at European and American universities have been around since the 1970s. However, at universities in Indonesia, such have only existed since the 2000s, imposing requirements for national accreditation of study programs by the higher education accreditation body (BAN-PT) (Romadlon & Arifin, 2021).

Curriculum Development

Curriculum development can be understood as a complex undertaking involving many types of decisions. More precisely, it is decisions needed to be made about the general goals students want and the specific teaching goals. (Alsubaie, 2016).The main areas or subjects of the Curriculum must be selected in the particular content that will be covered in several issues. A choice of courses should be made about the learning experiences that can be used in implementing content understanding and other objectives. (Lau, 2001) Context of decisions is needed

in evaluating what students learn and the effectiveness of the curriculum in achieving the targeted goals. It can be concluded that a choice needs to be made regarding the overall pattern of the curriculum that will be made (Taba, 1962).

The essence of the current curriculum is a concept that is not widely known. The idea behind the core curriculum is that it fosters cohesiveness and community within educational institutions. Those who support the core curriculum believe that stories, types of knowledge, and ways of thinking should be taught as the basis for shaping educated people in any community. In addition, forms of knowledge are represented in traditional academic disciplines, manifesting in ways of thinking. Subjects selected as part of the core curriculum include mathematics, history, languages and literature, science, and foreign languages (Null, 2011)

The Islamic Religious Education Study Program in Indonesia

The Religious Education Study Program at UIN Sunan Kalijaga was established on September 29, 1961 based on the Decree of the Minister of Religion Number 43 of 1960 and Number 2 of 1962 concerning the establishment of the Faculty of Tarbiyah and the Faculty of Adab in Yogyakarta. Initially called 'Department', it then changed to a Study Program in 2010 based on the Decree of the Director General of Islamic Education Number Dj.I/39/2010 (Suratno, 2012). The number of active and accredited religious education study programs in Indonesia is 456. The Religious Education Study Program has a vision of "superior and leading in the integration and development of science and Islamic religious education for civilization", which means the best in producing professional and good moral teachers, with prestige at the regional (2024) and international (2028) levels (Oktar, 2022). This vision is in line with the vision of the University and Faculty, which is superior and leading in the integration and development of Islamic science, science, and education (Idri, 2021).

Several references in the preparation of study program objectives include: the needs of graduate users, the Indonesian National Qualifications Framework (KKNI), the Merdeka Belajar-Kampus Merdeka (MBKM) Curriculum, and the integrative-interconnective model as a characteristic of the scientific model of UIN Sunan Kalijaga (Malik, 2020). Based on these references, the description of the study program objectives is prepared with the following scheme (1) identify the needs of

graduate users. For this, the study program conducts brainstorming with graduate users, alumni, and students. The results of the brainstorming were discussed with experts and faculty leaders, lecturers, and education staff; and (2) based on the results of the brainstorming, the objectives of the study program were formulated in accordance with the vision and mission of the study program. From the vision and mission, it is translated into graduate profiles and learning outcomes (LO) which are finally managed into the study program curriculum.

Methodology

This type of research uses survey research methods. The study used a survey method to process and obtain information and the need for completeness of the data. Survey research takes a sample from one population and uses a questionnaire as the primary data collection tool (Singarimbun & Effendi, 2006). Survey research is a form of activity that has become a habit in the academic community.

Participants

The population in this study were alumni of the Religious Education Study Program at UIN Sunan Kalijaga Yogyakarta from 2014 to 2017, with about 477 alumni. The sampling technique used is a stratified proportional random sampling of 63 percent of the total alumni population. Sampling in this study was 300 respondents consisting of alumni of the 2014 batch of 100 respondents; alumni of the 2015 batch of 90 respondents; and as many as 70 2016 alumni; the batch that entered in 2017 numbered 40 respondents, while those who followed and could be contacted and filled out a questionnaire numbered 178 respondents in an online survey. This data were collected during the COVID-19 pandemic, which was peaking in Indonesia.

Data Collection

The instrument in this study used a questionnaire for primary data collection, with the number of questions for 20 items consisting of 6 items asking for identity and 14 items asking for alumni mapping content. The instrument that has been developed is then tested for content validation by 3 validators. The three validators were selected based on the expertise of the Tracer Study at the University and the PAI study program tracer study team. The validity test of this four-level diagnostic test

instrument includes content validity test and empirical validity test. The content validity test was analysed using the V Aiken equation. The calculated V Aiken coefficient is then compared to the V Aiken table value. An item in the content validity test is said to be valid if the calculated V Aiken coefficient value is greater than or equal to the minimum value listed in the Aiken table (Aiken, 1985). The validated instrument was then analysed with the Aiken equation as presented in Equation (1).

$$V = \sum \frac{r - lo}{[n\,(c\,-\,1)}$$ (1)

Based on equation 1, *s* symbolizes the *n*th rater, *lo* symbolizes the lowest validity assessment number, c symbolizes the highest validity assessment number, and r symbolizes the number given by the nth rater. Then the instrument is given to alumni to fill in. The list of alumni is obtained from the graduation book for the last 3 years starting from the three-year period 2017/2018 to the three-year period 2020/2021. Then alumni phone numbers are collected from the graduation book that has been obtained. After collection, confirmation is carried out one by one to ask about work. In this confirmation, the alumni were given an instrument to fill out.

Data Analysis

Data analysis in this study used quantitative with a descriptive approach. A quantitative approach is a research approach that mainly uses the positivism paradigm in developing science. The data collection has previously been tested for validity and reliability. The data obtained from filling out the questionnaire for each respondent or alumni are considered. The data analysis method used was univariate, bivariate, and multivariate analysis. The results of statistical calculations are then described qualitatively, which aims to define each variable well. This survey study can contribute to clarifying and offering assistance to improve Higher Education (Schomburg, 2003) starting from collecting raw data, which is then arranged and separated according to the theme obtained. An equally important part is linking the subject by connecting the appropriate description theme and matching the description of the information from this research. The final stage is the interpretation of the meaning of the data. The analytical ability and knowledge of the researcher about the theme being carried out will determine the results or conclusions. Reasonable data interpretation and in-depth skills will lead to complete and valid results.

Results

Alumni Demographic Distribution

The target respondents are the Religious Education Study Program at the Faculty of Tarbiyah and Teacher Training at UIN Sunan Kalijaga Yogyakarta in 2021 who graduated within three years from 2017/2018 to 2020/2021 with a total of 477 graduations. The percentage of respondents' target achievement from the total sample is 300 graduates. This is in line with Rustiadi's opinion where the respondents selected were from the 2013 to 2017 classes (Rustiadi, 2020). Reinforcing ideas from alumni of the UGM undergraduate program, such reported that they could graduate in 2017.

Based on the graduation books for the three-years from 2017/2018 to 2020/2021 period, such consists of 13 graduation period books. With the distribution, in book one, there are 13 graduates; in book two, about 71 graduates; in book three, as many as 40 graduates; in book four, as many as 38 graduates; in book five, as many as 48 graduates; book six as many as 7 graduates; book seven as many as 74 graduates; book eight as many as 34 graduates; book nine as many as 34 graduates; book ten as many as 33 graduates; book 11 as many as 30 graduates; book 12 as many as 18 graduates; book 13 as many as 37 graduates. After getting the alumni from each graduation period, the mobile number was traced with the WhatsApp application active. The data obtained for each batch of graduates showed there were 84 graduates in 2017; 133 graduates in the 2018 batch; the 2019 postgraduate year batch of 175 people; the 2020 graduate year batch of 85 graduates. In terms of respondents, there was a sample of 300 that filled out the questionnaire, as many as 178 graduates, and 122 graduates who did not fill it out.

The activities of graduates of the Religious Education Study Program are currently categorized into four categories: first, busy with current work; second, continuing professional/master/doctoral/postgraduate studies; third, looking for work; fourth, continuing training or courses. The category, busy with current work, indicates that the graduates are employed (the majority are teachers of religious education) or have businesses. The other education category suggests that the alumni are currently pursuing higher education (profession/master/doctoral/postgraduate in the religious education study program). The job seeker category indicates that alumni are currently not working/still looking for work. The type of continuing training or courses shows alumni attend skills courses such as barbershop, cupping therapist,

gurah, massage, driver, etc. Based on the results of the Tracer study, the average activity of graduates of the religious education study program is that 62 percent of alumni are busy with their work, 24 percent are continuing their studies/study, 13 percent are looking for a job, and the remaining 1 percent are continuing training or courses.

The most common activity among alumni is being busy with work, at 62 percent. Furthermore, the demographics of these alumni are spread across various regions, as can be seen in Figure 1.

As shown in Figure 1, the distribution of alumni of the Religious Education Study Program is spread across sixteen provinces in Indonesia and one country abroad. The largest province is on the island of Java, namely, the area of D.I Yogyakarta, followed by Central Java, West Java, and East Java because on the island there are many schools and colleges, and the island dominates the
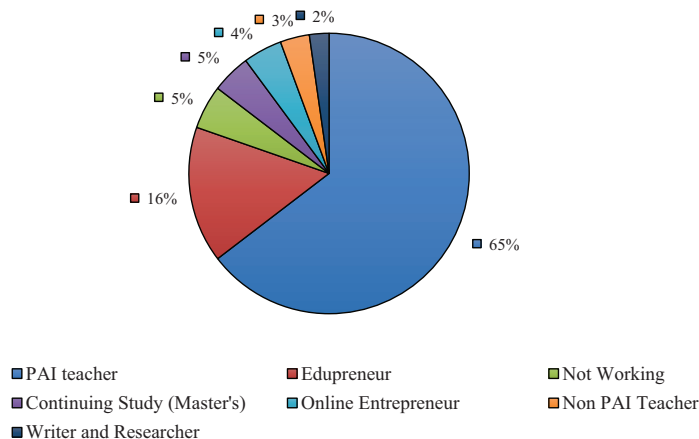
alumni of the religious education study program work. The percentages are DI Yogyakarta 53 percent, Central Java 29 percent, West Java 5 percent, East Java 4 percent, Riau, Lampung, North Sumatra, South Sumatra, South Sulawesi, West Sulawesi, Papua, West Nusa Tenggara, Central Kalimantan, Jakarta, Banten, Aceh, and Turkey (International) which are each 1 percent (Figure 1).

Alumni's Job Suitability with PAI Field of Knowledge

The largest distribution of alumni was in Yogyakarta, which amounted to 53 percent. Furthermore, mapping the suitability of alumni's work with the scientific field of PAI was conducted. This was done to develop the curriculum of the PAI study program at UIN Sunan Kalijaga. The job distribution of PAI study program alumni from the last 3 years can be seen in Figure 2.
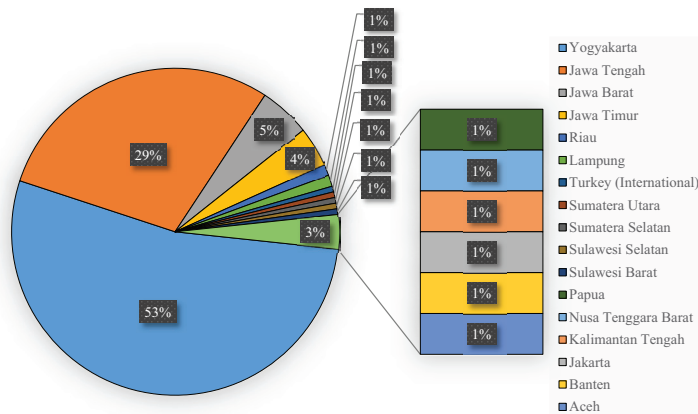
Figure 1 Demographic distribution of alumni

Figure 2 Work suitability with the field of science

The types of work currently occupied by graduates of the last four years of the Religious Education Study Program at UIN Sunan Kalijaga Yogyakarta are spread across various fields of work. A job becomes a livelihood activity following the education pursued, although it is often different from the field of education sought. In a Tracer study conducted on 178 alumni of religious education who filled out questionnaires, most of them worked in the field of education pursued during college. The details are as follows: 65 percent of alumni work in their field of education, namely, as religious education teachers, 16 percent are entrepreneurs, 5 percent are not yet working, 5 percent are continuing their studies, 4 percent are online entrepreneurs, 3 percent are non-religious education teachers, 2 percent writers and researchers. Several factors influence the diversity of alumni roles in business and industry—first, the limited job opportunities for the Religious Education Study Program. Second, there are many similar study programs at PTN and PTS or public and private universities.

A Tracer study is an important instrument in the curriculum development of the Islamic Education Study Program (PAI) because such provides an in-depth understanding of alumni success in the world of work, curriculum relevance to the needs of the job market, and alumni satisfaction with the education received. By utilizing tracer study data, institutions can adjust the curriculum to be more responsive to changes in the demands of the world of work and ensure that PAI Study Program graduates have the skills, knowledge, and competencies that match the needs of a dynamic job market.

Meanwhile, based on the results of the Tracer study presented in Figure 2, it shows that the mechanism for developing the Islamic religious education curriculum is based on alumni data as PAI teachers, edupreneurs, research assistants, and classroom teachers in elementary schools. The information obtained from these alumni becomes the basis for evaluating the success of the current curriculum and identifying areas that need to be improved or updated. Furthermore, as a result of the survey and feedback from alumni, the Islamic religious education curriculum can be revised or reorganized to include aspects relevant to success in the professions of PAI Teacher, edupreneur, research assistant, and classroom teacher in elementary schools. For example, the curriculum could include modules or subjects that reinforce teaching skills, business management, research methods, and developmentally appropriate learning approaches.

Finally, it is important to actively involve alumni in the process of curriculum development and evaluation on an ongoing basis. By engaging them as key stakeholders, educational institutions can ensure that the curriculum remains relevant and responsive to developments in the world of work and changing market demands. Close collaboration between educational institutions and alumni can also open up opportunities for internship programs, additional training, or other professional development that can enhance students' readiness for success in various professions related to Islamic religious education.

Discussion

The research conducted by Mangiduyos and Subia (2021) informed that there were 142 alumni used sampling, and the majority were from the 2014 batch (Mangiduyos & Subia, 2021). This result is in line with the research conducted, using a sample of 300 alumni and 216 participants from the 2014 batch. The distribution of the alumni of the religious education study program spread over sixteen provinces in Indonesia. The results of research by Ardianto et al. (2020) stated that as much as 68 percent of alumni in the undergraduate program were working, the next was to continue their studies to master's level, as much as 20 percent, married 7 percent, busy with family and children 3 percent, and as much as 2 percent answered otherwise (Ardianto et al., 2020). This is in line with the research conducted, namely, the average activity of alumni of the religious education study program being busy with their work was as much as 62 percent, the next was continuing their studies, as much as 24 percent, looking for job 13 percent, and continuing training or courses, as much as 1 percent. The number of alumni in work was higher in the research by (Ardianto et al., 2020), 68 percent, compared to research on the religious education study program, which was 62 percent. However, when viewed from the interest of alumni in continuing their education to a higher level, more research on religious education study programs is 24 percent.

According to Sunarso and Harits (2020), there is a match between the fields of work occupied by alumni and educational backgrounds of 86 percent (Sunarso & Harits, 2020). Similarly, most graduates currently work in jobs in the field of education pursued (Hipona et al., 2021). In line with the results of our research, it shows that 65 percent of alumni work in their field of education, namely, as teachers of Religious Education, indicating that the competence of graduates and areas of

expertise are to the demands/needs of the world of work, so the courses given to students during lectures are by the required graduate competencies. To produce ideal graduates up to 100 percent, it is necessary to redesign the curriculum based on the results of alumni mapping. The core, supporting, and elective courses need to be further developed by the demands of the current and future world of work. They are determining the employability of graduates and relevant and practical teacher education training to improve their job prospects after graduation (Abas et al., 2020).

Practical experience in school is the most important or influential journey of the current curriculum. With practice, students can communicate with the academic community, which is very meaningful. Because there is a broader interaction with academic staff, students, teachers, and the educational environment, it provides opportunities for students to practice being responsible for themselves and others through field practice (Beames et al., 2020). This can increase alumni trust and interest in the current curriculum in deciding what to study and how to learn it (Zhu et al., 2021). Therefore, capturing the voices of alumni can be used as a reference in developing a new curriculum design that is responsible, autonomous, accountable, and transparent so that it can increase the relevance of the curriculum to the needs of the world of work.

Alumni who work in the education field reflect alumni's satisfaction in studying. According to the results of research from Wiranto and Slameto (2021), there are 36.10 percent satisfied and categorized as having very high satisfaction. This shows that the professionalism of the lecturers is excellent. In line with the research that has been carried out, the percentage is even more significant than that of the Wiranto and Slameto analysis due to the suitability of the alumni diploma with the field of work and the content of the curriculum according to the needs of the community and stakeholders. Alumni satisfaction factors for higher education services include excellent service quality, education costs, comfort, friendliness, completeness of infrastructure, ease of service, easily accessible location, and academic atmosphere (Wiranto & Slameto, 2021).

In similar research, it was found that most of the graduates get a job in less than a month at 51 percent, followed by 1 to 6 months at 24.4 percent. Then, it is two to less than three years at 11.1 percent, followed by 7 to 11 months at 9 percent, and others as the last at 6 percent (Palay & Garcia, 2021). The majority of them find work in less than a month. In line with the research above, most religious education graduates get a job less

than three months after graduation, or around 66 percent; the next also shows that alumni less than six months after graduating as much as 21 percent; followed by less than 18 months after graduation 9 percent; some find work more than 18 months after graduation, as much as 4 percent. So, from the research data above, most religious education alumni get jobs in less than three months. Judging from the comparison of getting a job for less than six months, the results of (Palay & Garcia, 2021) are 75.4 percent, while the researchers got results of 87 percent, so religious education graduates are better than the (Palay & Garcia, 2021) research results.

This research is used to develop a curriculum (Kalaw, 2019) to prepare alumni for the world of work and relevant jobs to innovate in the future. The Curriculum Document produced by the religious education study program refers to the Kemendikbud Research and Technology Higher Education Curriculum model with eight steps. Based on the accreditation of study programs, curriculum documents are prepared with 11 elements. The second element contains a needs analysis, which is very much needed by stakeholders obtained from alumni mapping/tracer study results. In compiling learning outcomes, one must refer to SN-Dikti, the primary reference or foundation in curriculum development. The Religious Education Study Program curriculum has used an Outcome-based education (OBE) approach. Because the OBE approach is very compatible with SN-Dikti, starting from planning, implementing, and evaluating the curriculum, it focuses on achieving CPL.

The development of the religious education curriculum can be interpreted as an activity to formulate, produce, implement, evaluate, and perfect a better religious education curriculum by providing synergies between its components (Aulia et al., 2022; Pakpahan, 2020). Constructivism learning is a solution to increase student activities as a busy challenge connected with knowledge and goals. Future challenges in curriculum development are faced with online learning innovations that damage the relationship between lecturers and students (O'Connor, 2022). For alumni mapping, it should be systematized in the academic section of the university so that it becomes part of the evaluation of learning outcomes and the achievement of graduate profiles. Mapping alumni is also used for curriculum equality in achieving justice to get jobs. Also, realizing a democratic education system requires support from religious and political institutions to form a tolerant and humane society (Michel, 2020).

According to Piškur et al. (2022) curriculum guidelines do not provide an adequate framework (Piškur

et al., 2022). Academics seek to design and implement an effective participatory curriculum development process (Alexander & Hjortsø, 2019; Annala et al., 2020). Program redesigned, allowing for the creation of a rigorous, research-based and customized curriculum (Zimmer & Keiper, 2020). Huang said that as the number of students increases, educational goals become more diverse in order to be responsive and relevant to the diverse backgrounds and needs of students (Huang, 2016). Therefore, the religious education curriculum is developed according to the needs by referring to the mapping alumni.

Developing a curriculum based on graduate mapping outcomes is a highly relevant approach in the context of curriculum development in higher education. Research and analysis of graduate success after graduation can identify the competencies or skills needed in the job market or society. This approach allows curriculum development to be more responsive to the job market's and society's needs, ensuring that graduates possess relevant and applicable skills in the real world (Bridgstock et al., 2019; Khan & Law, 2015). Graduate mapping outcomes also provide valuable information about graduate career success, weaknesses that need to be addressed, and opportunities for curriculum improvement. Thus, curriculum development based on graduate mapping outcomes can serve as a strong foundation for enhancing the relevance, quality, and competitiveness of curricula in higher education.

Conclusion and Recommendation

Alumni mapping is used as the basis for curriculum development for the Religious Education Study Program to improve the quality or quality of graduates resulting from tracer study measurements. Religious education curriculum development must focus on the study tracer's results, and learning outcomes must be measurable with the vision of globalization, economy, information technology, and socio-culture. The preparation of learning outcomes starts at the University. The graduate attributes are lowered to the Learning Outcomes Program, then to Learning Outcomes Courses, and then to Lesson Learning Outcomes. In measuring Learning Outcomes, it is better to look at the results of the tracer studies that have been produced. As a result, the level of participants who filled out the questionnaire was 59.33 percent, categorized as high, then the activities of alumni who were busy with their work, as much as 62 percent were in the high category.

Meanwhile, 24 percent of alumni continue their studies to Master and Doctoral levels. Then, the remaining 14 percent continue training and courses and are still looking for work. The suitability of work in the field of science/curriculum is categorized as high as 65 percent for religious education teachers. The geographical distribution of Yogyakarta is 53 percent, and the remaining 35 percent are spread across various parts of Indonesia and overseas. However, the waiting time for graduates of less than three months to get a job is 66 percent, whereas 80 percent of the agencies work in schools, categorized as very high.

Conflict of Interest

The authors declare that there is no conflict of interest.

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