Abstract—The concept of ESD was born from the need for education to address the growing environmental challenges facing the world. In order to do this, education must change to provide the knowledge, skills, values and attitudes that empower learners to contribute to sustainable development. At the same time, education must be strengthened in all agendas, programmes and activities that promote sustainable development. In short, sustainable development must be integrated into education and education must be integrated into sustainable development. ESD is holistic and transformational education and concerns learning content and outcomes, pedagogy and the learning environment. Through targeted development approaches require lecturers explore popular education theory perspectives to upgrade the quality of teaching. This article aims to examine one of the efforts of universities to improve the quality of lecturers through exchange programs. The method used is Systematic Literature Review. The results of the study show that the lecturer exchange program can improve the quality of lecturers, it is evident that lecturer exchanges can broaden the knowledge of lecturers about new perspectives in carrying out the teaching and learning process, the benefits of lecturer exchanges will be more detailed in the discussion section of this article.

Keywords—sustainable development goals; education for sustainable development; exchange programme

I. INTRODUCTION

ESD (education for sustainable development) is a learning process based on the goals and principles underlying sustainability and related to all levels and types of education [1]. ESD supports five basic types of learning to provide quality education and foster sustainable humanity, which are learning to know, learning to be, learning to live together, learning to do, and learning to transform oneself and society [2].

According to the Asia-Pacific regional report, ESD is seen as an approach in education to develop values that support sustainable development with the aim of helping humans to learn about knowledge that is relevant to values, to develop healthy habits and life style that will lead to sustainable development for the entire community [1]. ESD also contributes to the acquisition and practice of knowledge, values and skills that ensure a balance between the economic, social and environmental aspects of sustainable development in an effort to progress in the lives of both individuals and communities [3].

To realize the objectives of ESD, an effort to reorient education is needed to support the implementation of ESD in the world of education. Reorientation of education can be conducted through reorientation of the curriculum by identifying several aspects, which are knowledge, issues, perspectives, skills, and values related to sustainable development that integrates the three main pillars comprising of environmental, economic and social [2]. Ideally, efforts to reorient education must be based on local and national sustainability goals. Hence, the reorientation of education will be more relevant to local and national conditions. ESD is a mean to transfer knowledge, values, and skills and to develop human capacity related to sustainability issues so that they can determine how to sustain their lives. It should be underlined that ESD contains characteristics that are the creation of awareness, containing local and global vision, learning to be responsible, learning to change, participation, lifelong learning, critical thinking, systemic approaches, and understanding the complexity, decision-making, interdisciplinary skill, problems-solving, satisfying the needs of the present without compromising the future generations [1-3].

From the statement above, it can be concluded that Education for Sustainable Development (ESD) is a new culture of education and new direction in teaching and learning of content and methods. ESD means incorporating the central issues of sustainable development into education and learning and supporting the acquisition of competencies that enable people to live and act in a sustainable way. On an international level, it is increasingly acknowledged that ESD represents a main element of high-quality education. It is obvious that ESD has been included in the 2030 Agenda for Sustainable Development as well as the Muscat Agreement on the occasion of Global Education for Meeting in the past year [4]. To achieve this objective and, thus, transforming education system is essential to build the capacities of teachers [2]. Focused professional development opportunities are also significant to empower educators to teach ESD. Effective education depends
on motivating teachers to bring about not only in their instructional practices, but also in their surrounding schools and community environments. Through targeted development approaches, educators explore popular education theory perspectives [1] that encourage learners to examine their lives critically and take action to change social conditions. Using people's experience as a starting point [2-4] community works to identify problems, then reflects on and analyze it.

In the era of internationalization of higher education, ESD still continues to be guides in the implementation of education. One of them is in efforts to improve the quality of lecturers for the realization of education that is in line with the principles of Sustainable Development Goal [5-8]. In this article, the author will try to identify the efforts made by higher education in improving the quality of lecturers for the realization of ESD in the era of internationalization.

II. METHOD

This article uses the Systematic Literature Review. Systematic literature review or in Indonesian language is called discus systematic literature is a literature review method that identifies, evaluates, and interprets all findings on a research topic, to answer a research question that has been previously conducted. This article reviews international journals originating from Scopus, where Scopus has a good reputation and is also a reference for academics. Then, the selection of articles is seen based on the period of the last ten years so that the articles obtained are still concerned as the latest articles. In searching for articles, use the keywords of Education for Sustainable Development, which are then narrowed down by keywords: Lecturer Exchange Program.

III. FINDING AND DISCUSSION

In this section, the results are divided into three parts consisting of searching for the appropriate literature using keywords (see Table 1. Keywords). After finding relevant literature, the second part is categorizing literature. In the last part, a further analysis is carried out, that is the review of the contents of the article.

A. Literature Searching

Literature searching was conducted through the Scopus database. Searching is conducted for one week that is on 02-25-2019 until 31-02-2019 by using the keywords of Education for Sustainable Development, which is then narrowed down with keywords of Lecturer Exchange Program. From the search, it was obtained the desired article. The following details are the search results in both databases:

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education for Sustainable Develop</td>
<td>17,158</td>
</tr>
<tr>
<td>Lecturer Exchange Programme</td>
<td>14</td>
</tr>
</tbody>
</table>

B. Literature Categorizing

After obtaining 14 articles that are in accordance with the focus of the study, the next step is grouping or categorizing literature in this study divided into 3 steps: First, the literature is limited to quotations without further discussion. In other words, the keyword is only a quote and used in the introductory section. Second, in the form of quotations, and use them in discussions. That is, these keywords are not only used in the introduction but also in the discussion section. Third, articles obtained from searches through keywords are irrelevant. This category is based on how far these keywords are used in the literature. The results of the literature categorization in this study can be seen in Table 2 below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>Introduction and Discussion</td>
<td>5</td>
</tr>
<tr>
<td>Irrelevant Article</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 2 shows that from all articles obtained, (1) there are 6 articles using keywords only in the introduction, (2) 5 articles using keywords in the introduction and discussion, and (3) 3 articles irrelevant. In short, it can be concluded that the results of the literature categorization show that most articles use keywords only as quotes in the introduction.

C. Review of Article Contents

The five articles that use keywords to the discussion section, in summary, those articles provide the following information:

1) The Importance of improving the quality of lecturers for the realization of ESD: UNESCO has been identified as one of the key aspects that support quality of education related to the individual learners and systems of education is acknowledgment of the learner's knowledge and experience [1,2, 9]. Learning brings them a history of life experiences. All of these experiences, both positive and negative, affect on how they learn. Some of their experiences can enhance their and others' learning. In a setting that creates quality of education, learners are affirmed for their existing knowledge. Teaching and learning skills are part of both quality of education and ESD [1,9]. Good ESD is an example of quality of education. Ultimately, quality of education is part of achieving international development targets; in doing so, it must foster sustainability [3,4]. As an adaptive concept, quality of education can be applied to a variety of disciplinary and educational reforms in the full range of educational settings. Moreover, addressing the essential parts of ESD allows ESD to go into the mainstream of formal education. Addressing the quality permits the teachers to address issues with their nations and higher education systems.

In addition, lecturers are agents of change who can provide the educational response needed to achieve ESD. The knowledge and competence they have is very important to
restructure the education process and educational institutions towards sustainability [3,5,10]. Lecturers are required to face this challenge by reorienting themselves towards ESD. However, efforts to prepare lecturers to implement ESD are still not advanced enough. There is still a lot of work that needs to be done to direct lecturers towards education for sustainable development, in terms of content, teaching methods and learning [11-13]. For lecturers to be ready to facilitate ESD, lecturers must develop competencies. Besides competency, the ability of lecturers is needed to help students develop sustainability competencies through a variety of innovative teaching and learning practices [6-8]. In addition, lecturers must equip students with the ability to work together, especially in the international world as a provision to face global challenges [5,6].

2) Improving the quality of lecturers through exchange programme: After analyzing the contents of the article, the lecturer exchange program is intended to create lecturers who can develop competencies that enable individuals to reflect on their own actions by taking into account their current and future social, cultural, economic and environmental impacts from both a local and a global perspective. Therefore, in this era of internationalization, higher education conduct lecturer exchange programs or often referred to as international academic mobility. Physical lecturer mobility is obviously the most visible international activity, and it is in the forefront of aiming to enrich insight programs. This lecturer mobility is applied for a short period or the whole study program as well as scholars’ mobility for attending conferences, visiting research partners abroad and longer stays in other countries for research purposes, and migration events and international professional mobility [5-8]. In addition, the program provides positive benefits for lecturers, are:

- Extending the comparison of teaching concepts and curriculum which can be adopted so that universities have more innovative teaching concepts [5,6,8,11].
- Supporting lecturers in mastering languages [7,8,13,14].
- Expanding collaboration networks. The collaboration refers to collaborative research and publications in reputable international journals [6,7,12,13].

IV. CONCLUSION

After searching and sorting relevant articles, several articles were obtained using keywords more deeply in the discussion section. From several of these articles that use keywords to the discussion, it is proven that the lecturer exchange program can improve the quality of lecturers, and it also could broaden the knowledge of lecturers about new perspectives in carrying out the teaching and learning process. A more interesting finding is the need for clear and standard policies of the governing lecturer exchange program. The results of various articles show that it is still needed many support for the continuation of the lecturer exchange. This policy can regulate the running of the lecturer exchange in order to create higher education for sustainable development.

REFERENCES