

## **‘THE PATH LESS TAKEN’: INTEGRATING ENVIRONMENTAL SUSTAINABILITY AND PROTECTION IN THE LIBYAN EFL TEACHER EDUCATION PROGRAMMES**

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### **Abstract**

The need to include environmental issues such as air pollution, deforestation, and global warming in EFL teacher education programmes is growing. This suggests that in order to increase their students' awareness of the environmental issues and how to be responsible citizens, English language instructors could incorporate both local and worldwide environmental sustainability topics into their teaching practice. However, that is not the case in Libya, where the environment sustainability is neglected in most of the Libyan stages of education. The purpose of this study is to investigate the trial of using micro teaching to incorporate environmental sustainability into English language 'Teaching Methods courses'. It is conducted in Sabratha College of Arts and Education in the English Department. Based on reflection journals from 31 preservice teachers, instructor notes, and focus group, the findings of this study demonstrate how including environmental sustainability in the curriculum enhanced the preservice teachers' academic performance, autonomy, and teaching skills. Additionally, it helped them better understand their self-worth, and the positive roles that they can play in the Libyan society. This study's findings add to the body of knowledge that emphasizes the significance of addressing environmental sustainability at all educational levels.

**Keywords:** Awareness, EFL, Environmental issues, Sustainability, Teacher education

### **1. INTRODUCTION**

"Education has always been the most functional tool for tackling problems, and there is no doubt that today's education will influence the world of tomorrow," stated Mashaba et al. (2022), p. 5. Education is therefore seen as an appropriate avenue through which to change society by imparting environmental protection knowledge and skills. Environmental sustainability is a key component of teacher education curricula, Damoah & Omodan (2023). The success of any educational policy mostly rests on the shoulders of teachers, who are the essential players in schools. Thus, one of the most important ways to increase public knowledge of environmental sustainability issues is through teacher education. In order to adequately train future teachers for their roles in promoting environmental consciousness and teaching pupils about environmental conservation, Esa (2010) emphasized the necessity for increasing the efforts in teacher education. In terms of EFL teacher education, environmental sustainability subjects should be included in the curricula to help English language teachers become knowledgeable about environmental issues and capable of incorporating them into their instruction. Maijala et al. (2023) stated that in order to include these issues into teaching practice, language teachers must possess pedagogical skills in addition to linguistic and cultural understanding of the foreign language. Raising students' knowledge of environmental issues through in-class and extracurricular activities is the major goal of integrating sustainability and environmental topics into EFL instruction (Tang, 2009). Tree-planting, cutting back on plastic use, recycling, taking part in environmental initiatives, and educating others about environmental issues are a few examples of

environmentally friendly activities, (Veselinovsk & Kirova, 2013).

Because of a number of circumstances, including the absence of any environmental topics from the curricula of preservice teacher education programmes at education colleges, environmental sustainability literacy is still poor in Libya, the study's context. Teachers also don't seem aware of how important it is to incorporate environmental issues into their lessons. Saglam & Gursoy (2010) mentioned that since scientific and engineering education are closely related to environmental sustainability, the majority of environmental initiatives and activities take place in these colleges rather than in education colleges.

However, interdisciplinary approaches are necessary to achieve environmental sustainability, as stated by Saglam & Gursoy (2011). 'Teacher trainees' awareness and knowledge is an important factor in providing such an education in their future profession, as they can influence students' attitudes, views, and interaction with the environment' (p 48). Thus, the goal of this study is to investigate a trial of incorporating environmental sustainability into the teaching methods course for preservice Libyan EFL teachers.

## **2. LITERATURE REVIEW**

### **2.1 Environmental Sustainability in Teacher Education Programmes**

The primary goal of education for sustainable development, or ESD, is to equip people with the attitudes, abilities, and information needed to confront issues related to sustainable development and make choices that will maintain society for both the present and the future. Therefore, it is crucial to be aware of the environment and how to protect it, which calls for specialized training, (Hofman, 2015). Leading universities have recently offered initiatives and programmes to put sustainability concepts into practice (Merkel and Litten, 2007). Major adjustments to institutional culture are necessary in order to integrate environmental sustainability into university courses, policies, and research, (Ralph & Stubbs, 2014).

The necessity of incorporating environmental sustainability education into elementary and secondary school curricula led to the selection of the teacher education programmes. Through this, future teachers will be prepared to favorably impact societal development and environmental conservation. Teachers must possess the necessary content and environmental pedagogical expertise in order to accomplish this. According to Mashaba et al. (2022), preservice teachers should have adequate knowledge and skills on environment education before they are employed.

It is crucial to begin environmental education or sustainability programmes in elementary schools in order to increase public knowledge of environmental issues. Preservice teachers will therefore be crucial since they will serve as role models for their students, helping them to become more environmentally conscious. Future teachers must be aware of the environmental issues and have a positive attitude towards the environment in order to accomplish this. Junger et al (2023) stated that preservice teacher training is crucial because "its effects directly impact Basic Education" (P.1).

According to Nkwetisama (2011), teaching languages can be a valuable tool for teaching environmental education and sustainability. As a result, EFL instructors can incorporate environmental concerns into their language instruction. For instance, by assigning pupils to write about "the causes and effects of global warming," the teacher can model "cause and effect essays" (Yastibas, 2021). As part of their writing assignments, students may conduct searches, read books or articles, view videos, and listen to podcasts. They will next incorporate what they have learned from their research into their essays. They learn about global warming and how to write cause-and-effect essays from this activity, which may increase their awareness and get them to consider the impact of their everyday actions on the environment. Preservice EFL teachers' awareness of environmental issues may therefore be increased when environmental education is incorporated into their preservice teacher education.

Environmental education could be incorporated into teacher education in a variety of ways, according to Damoah & Omodan (2023). An appropriate approach would be to create environmental education modules that cover subjects like sustainability and conservation. Including environmental issues in the offered courses is another strategy. For example, teachers can use a variety of techniques, such as project-based learning, digital storytelling, and eco-friendly activities, to incorporate environmental themes into language and social science classes and field trips.

### **2.2 Challenges of Implementing Environmental Sustainability in the Teaching Practice**

The environmental knowledge of pre-service teachers has been the subject of numerous research. Gursoy & Saglam (2011) argued that teacher education programmes fall short in providing preservice teachers with

sufficient environmental literacy. Liu et al. (2015), for instance, looked at Taiwanese in-service teachers' knowledge of environmental education. The results showed that most teachers do not incorporate environmental issues into their lessons because they do not have the adequate environmental knowledge. Acebal Exposito (2011) contended that the inadequate integration of environmental issues in preservice teachers' education in Spain leaves them without the necessary expertise to integrate these topics into their teaching. Mosothwane and Ndwapi (2012) also noted that environmental education has not been included in the curricula of Botswana's education colleges for pre-service teachers. In order to teach EE, the graduate teachers lacked the necessary knowledge.

Liu et al.'s (2020) research findings revealed that pre-service teachers in China lacked confidence in their ability to teach environmental education and had insufficient knowledge of the environment. Similarly, Ogunyemi and Ifegbesans' (2011) research showed that Nigerian pre-service teachers receive limited training in EE approaches and material. This is also consistent with a study undertaken at Ethiopian institutes of education by Kassahun (2007).

However, other factors, such as the administration, the pupils, and the lack of time, might be the reasons beyond the limited integration of environmental education in schools rather than teacher education programmes, (Huoponen, 2023). For instance, a study by Damoah & Adu (2019) investigated the difficulties South African in-service teachers had in incorporating EE into their lessons. The results demonstrated that the main challenges were the absence of policy guidelines and the lack of clarity on the inclusion of EE. This is because those teachers did not obtain pre-service or in-service training on teaching EE, (Damoah & Omodan, 2023). According to Calero et al.'s (2019) research findings, teachers who do not think sustainability is a relevant issue will not incorporate it into their lessons. According to Damoah & Omodan (2023), teacher educators were unable to consistently incorporate environmental topics in preservice lesson plans. They might be demotivated because of the lack of professional support, incentives and the sufficient time due to their heavy workloads. In addition, Almeida (2015) argued that few instructors have the ability to integrate EE into pre-service teachers' programmes.

According to Tilbury (1992), incorporating environmental education is the "priority of priorities" in preservice teacher preparation. Unfortunately, to the researcher's knowledge, the curricula in the Libyan education colleges do not include sustainability and environmental themes and methodologies. On the other hand, there are some environmental and sustainable themes in the English-language textbooks used in elementary and secondary education. This makes the study's investigation of the trial of incorporating environmental topics into a third-year Teaching Methods course crucial. It also intends to explore students' perspectives regarding environmental education, the advantages they derive from the experience, and the difficulties they have encountered.

The study intends to fill a gap in the literature because, to the best of the researchers' knowledge, no research has been done about integrating environmental sustainability into Libyan EFL education programmes or raising EFL preservice teachers' awareness of environmental issues. The findings of this study might serve as the foundation for additional improvement and revisions of EFL teacher education curricula, as well as for motivating future teachers to incorporate environmental sustainability in their future classrooms.

### **3. RESEARCH QUESTIONS**

This study aims to answer the following research questions:

1. What do preservice teachers think of integrating environmental issues in the English language teaching methods course?
2. What are the possible benefits of integrating environmental issues in the ELT curricula?
3. What are the challenges of incorporating environmental issues in the teaching methods course?

### **4. METHODOLOGY**

#### **4.1 Research Design**

This study used a qualitative method in order to gain an in-depth understanding of the trial of integrating environmental sustainability in Teaching Methods course. Data was collected from focus group, reflection sheets and instructor's notes. The study was conducted at the English Department, Sabratha College of Arts & Education.

## 4.2 Participants

Thirty-one third-year EFL Libyan preservice teachers are involved. They are enrolled in the College of Arts & Education's Teacher Education programme. They are between the ages of 20 and 23. There were twenty-six female and five male participants.

## 4.3 The Micro Teaching Tasks

Traditional teaching approaches are insufficient to alter preservice teachers' understanding and attitudes about the environment, (Kuvac and Koc ,2019). Because the effects of environmental issues will be ingrained in people's daily activities, new thoughts and viewpoints about these issues need to be incorporated into curricula. Damoah & Omodan (2023) contend that preservice EFL teachers should have hands-on experience with environmental education as part of their teacher education programme. Thus, practical experience will help future teachers become more adept at integrating environmental sustainability into their lesson plans. This trial entails incorporating teaching materials about sustainability and the environment into a course on English language teaching methods. This course was selected because it could be utilized to give preservice teachers the skills they need to include environmental sustainability into their lesson plans, according to Gursoy & Saglam (2011).

At a public university in Libya, the required course "Teaching Methods for EFL teachers" is taught in the third year of the degree programme in the Education college. Since the primary objective of the course is to enhance the teaching abilities of preservice teachers, it can be utilized efficiently for this purpose. This is accomplished through a number of readings, independent study, semi-directed activities, and, most importantly, a microteaching experience where preservice teachers put what they have learned in the course into practice. The aim of the microteaching task is to prepare preservice teachers by giving them real-world teaching experience in the classroom and providing feedback from both their instructor and fellow students. With the use of this strategy, preservice teachers can reflect on their instruction, learn new methods, and knowledge from their peers, (Uzun, 2012).

After going over the primary ELT methods of teaching, students transitioned from theory to practice. Sample lesson plans, articles, films, and posters were distributed to the groups prior to practice. The two main tasks for the teaching methods class project entitled "*Better environment, Better tomorrow*" were: (1) teaching one of the English language skills about one of the environmental issues, including water scarcity, waste management, recycling, climate change, biodiversity loss, and environment conservation. In order to practice teaching, the students were asked to design lesson plans, teaching aids, and teaching activities. (2) the preservice teachers were encouraged to design posters, plant trees, and organize clean-up campaign in order to raise other students' awareness about the environmental issues.

## 4.4 Research Tools

Instructor's notes, reflection sheets, and focus group were used to gather the data. Focus group interviews were chosen because they offer a structured framework with flexibility, enabling participants to freely express their opinions and provide in-depth accounts of their experiences, (Cohen, et al., 2007). During the focus group discussion, questions concerning their opinions on the teaching experience were asked. They were invited to talk about their positive outcomes as well as the difficulties in incorporating environmental sustainability into the curriculum for schools. Part of the discussion was about the teaching aids, resources, and techniques they had selected.

After completing the project, the preservice teachers were also encouraged to submit their reflection sheets regarding their experiences as teachers. The participants' opinions on the experience, what they learned, what they would do differently if they were given the same work again, and what should be changed in the instructions were all included in the reflection sheets. The participants were encouraged to self-reflection because it is the basis for brainstorming, investigations, making decisions and discussions of learners' experiences, (ibid, 2021). In addition, environmental education relies heavily on teaching students to reflect. It may be possible to effectively teach students to become responsible citizens by imparting knowledge and having them relate it to behavioral reflection. Ruthanam & Reddy (2021) contend that for learning to have an impact on students' behavior, it must be applied to their everyday lives and translated into actions.

In order to cross-check and validate the emergent themes, classroom notes from every stage of the project were also kept to be able to triangulate the data.

## 4.5 Process of Data Collection and Analysis

An informal focus group discussion was arranged after the teaching task was finished. The primary topics of the discussion included the preservice teachers' opinions of the experience, the advantages realized, the

difficulties of the task, and how I could make the project better. Furthermore, all participants were invited to turn in reflection sheets on how their selections of instructional strategies, resources, and tools will support their success in meeting the goals of the lessons they were given. In addition, they were encouraged to reflect on their teaching experience, its benefits and challenges and their suggestions for improvement.

The data of this research was analyzed through the use of a content analysis method. I read the data and grouped it into themes. The themes were generated based on both frequent occurrence of information and the research questions.

## 5. FINDINGS AND DISCUSSIONS

### 5.1. What Do Preservice Teachers Think of Integrating Environmental Issues in The Teaching Methods Course?

The majority of research participants were actively working on the given tasks. They viewed the experience as difficult but enlightening and fascinating. S4 said: *'it was one of the most challenging yet interesting tasks that I have ever did. I discovered that I can do so many things that I was not aware of like acting, lecturing in public and being helpful'*.

Through the reflection sheets, some participants reflected on what they assumed when the topic was first introduced and how their attitudes changed over time. S13 said: *'I was worried when I heard that we will teach a lesson related to environmental sustainability as a topic. Then, it ended to be one of the most interesting tasks that I did through my college learning'*.

The majority of the study participants expressed a willingness to learn more about environmental education and use it in future lessons during the focus group discussion. Several preservice teachers who work part-time jobs and teach children in private language centers or nurseries reported using some of the tasks and activities in their courses. S25 said: *'after this teaching experience, I started using drawing activity and storytelling about the endangered animals and the kids were interested to participate. we also planted some trees in the school garden'*.

The participants appeared to be helpful and cooperative with one another based on the instructor's observation to their work in the Teaching methods on-ground classroom and Google Classroom. The majority of them actively shared resources and videos in the Teaching Methods Google Classroom. It was also observed that certain groups utilized their leisure time to work at the college and sought assistance from other instructors and peers, resulting in a welcoming and conducive learning environment for all. In her reflection sheet, a student noted that *'I learnt and had fun with my friends. when we can mix learning with fun we can achieve more'*.

### 5.2. What Are The Possible Benefits of Integrating Environmental Issues in The Curricula?

The participants of this research mentioned the following benefits for the teaching task:

#### 5.2.1 Improvement in the Academic Performance

The majority of participants stated that having to read teaching materials, develop summaries and lesson plans, discuss the key ideas, and teach in English had improved their language skills because of the micro teaching experience. S4 stated *'to teach this lesson, I had to read a lot, write notes and drafts of the lesson plan, learn new words and present the lesson in English'*.

Furthermore, the students gained new knowledge and enhanced their content understanding on sustainability as a result of this project. Reading relevant materials, such as books and other periodicals and articles that are utilized as reference teaching materials, is a necessary part of learning. S3 mentioned: *'I think the advantages are we learned new information about sustainability that we did not know before. Also, I learnt about the damage that we as human causes to the environment. S26 added: 'this experience improved my vocabulary. I learnt so many related words, facts and information about local and global challenges and initiatives'*.

The participants' autonomy was also enhanced by this experience because they were required to search, prepare, read, and deliver their work. The majority of the work was completed by the students using a learner-centered method, with assistance and guidance from the instructor. S2 stated: *'I worked with my group, shared ideas and concerns and did most of the work. We asked the teacher for help only when we get stuck'*.

### **5.2.2. Enhancement of Teaching Skills**

Because they experienced every step of the teaching process—from planning the lesson to explaining it to reflecting on their work—the micro teaching experience improved the preservice teachers' ability to teach. The research participants created environmental learning activities such as storytelling, debates, and group competitions. They also created posters and teaching aids to further clarify their teachings. One of the groups designed the teaching aids from recycled materials. S5 said: *'it was hard at the beginning to think of visual aids but I checked you tube video and designed a creative poster'*.

Some participants produced additional instructional materials specifically for the microteaching task. For instance, they used English songs about the environment; they also created discussions and debates about local issues (tree cutting, endangered species, food waste), using authentic resources such as articles and images from magazines or newspapers. The participants' motivation and positive attitude toward the surroundings were improved by these exercises and teaching aids. S27 said: *'the activities part was real fun. We acted, draw, sang and played games. What is important, we learned how to take care of the environment'*.

### **5.2.3. Promoting Personal Responsibilities**

The majority of participants stated that they feel more responsible for society's problems and the environment as a whole. S30 said: *'now, I have different understanding about my role as a teacher. I will do a lot of projects with my students to raise their awareness'*. S7 added: *'it is not just teaching and grading. We must do something to save the environment'. We need to improve our society and keep it clean'*.

Some students mentioned that they changed some of their daily habits to protect the environment. S8 added: *'I started trying to do more exercise and to preserve the environment around me and keep it clean and not waste water, and food and turn off the electrical appliance when I am not using them. S4 added: 'I planted trees and started to take care of the garden. I also recycled some items'*. Also, some students mentioned that they will encourage their colleagues and friends to take care of the environment. S10 stated: *'Yes, and I will tell them about the things I have studied about sustainability, not wasting and preserving the environment'*.

### **5.2.4. Connecting Classroom Learning with Real World Actions**

Most of the participants stated that having the opportunity to learn about, teach, and reflect on their teaching practices about environmental sustainability have helped them become more knowledgeable about environmental issues. I observed that the participants were motivated to learn about the environment since it was relevant to their real-life experiences not only because it is part of the task that they have to complete to pass.

This experience was an effective model to train the preservice teachers about how to integrate environmental issues in the language classroom and to reflect on their behaviors and daily habits. What is more, most of the participants showed the tendency to integrate the environment in their teaching when they graduate as teachers. S23 stated: *'what I like about this project is that it is about our daily behaviors and what we can do to protect the planet'*.

## **5.4. What Are The Challenges of Incorporating Environmental Issues in The Teaching Methods Course?**

Some participants described the teaching experience as a challenging task because of their lack of knowledge about sustainability. S6 mentioned: *'the topic is new for me. that means a lot of reading and extra work and we have to prepare for the other subjects. S13 added: 'I am not sure that I know enough information about sustainability. it is easier to teach about familiar topics like sports or food'. this topic requires extra preparation and even the vocabularies are new'*. Furthermore, a few participants said on their reflection sheets that they found the issue challenging since they were unsure of their language proficiency. S17 said: *'I faced problem in pronouncing some terms because they are new to me. Also, I read a lot to get idea about the topic and that was time consuming'*. When asked what they would need in order to integrate sustainability into their future classes, the majority of students said that they would need sufficient time, motivated pupils, and supportive administration.

## **6. DISCUSSION AND IMPLICATIONS**

This research aimed to investigate the trial of integrating environmental sustainability in the English teaching methods course through micro teaching. The results demonstrated that the majority of participants thought the experience was instructive and helpful. The participants reported that the experience improved their

academic skills, autonomy, teaching skills, and sense of social responsibility to preserve the environment and incorporate it into their future teaching practices. Raising awareness, according to Mashaba et al. (2022), demonstrates that students are committed to learning and making a constructive contribution to environmental protection. Additionally, students' environmental awareness and pro-environmental attitudes can be generated by outdoor activities and exposure to nature (Zelenski, et al. 2015).

These results are significant because they show how eager the preservice teachers are to learn about environmental sustainability and how they can incorporate it to their teaching practice. Additionally, the majority of participants stated that it is their responsibility to educate others about environmental protection and raising people's awareness of it. These results are in line with a study conducted by Gursoy & Saglam (2011), which revealed that their participants had a propensity to incorporate environmental education into their future coursework if they gained the necessary knowledge.

The participants of this research mentioned that this experience changed their perspective of their role in the society. Some of them began by reflecting on their own behaviors and made the decision to use less plastic products, exercise more and recycle. This is consistent with Bercasio's research findings (2022), which revealed that the participants in his study showed change in their daily routine like using eco-friendly bags, recycling papers and plastic products and minimizing the waste. Teacher education programmes are thought to be essential for transforming society and improving educational sustainability, according to UNESCO (2010). As a result, teaching preservice teachers about environmental and sustainable themes enhances their social responsibility and pedagogical abilities (Gursoy, 2011). Therefore, it is crucial for EFL teachers to educate and encourage their students about the environment and ways to preserve it. As a result, integrating environmental issues into teacher education, pre-service, and in-service training is crucial. Teachers' awareness and content knowledge about the environment may increase if environmental issues are included into their professional development training.

According to Martin-Ezpeleta (2020), preservice teachers should have positive environmental attitudes to transfer those values to their future students. In this way, educational practices like project work and micro teaching will assist in forming pro-environmental attitudes and pro-environmental behaviors in future teachers. The absence of environmental awareness among preservice teachers and the gaps in teacher education programmes may be effectively addressed by students' participation in the environmental project that they chose, developed, planned, and carried out (Bercasio, 2022).

Regarding the difficulties, the participants encountered, a few of them spoke of their anxiety over making grammatical and pronunciation errors. Along with the participants' lack of confidence to deliver the topics in front of the class, another challenge was their unfamiliarity with sustainability. This is consistent with the findings of Uzun's (2012) study, which revealed that the preservice teachers in his study were concerned about how to effectively explain the material to their colleagues and were nervous about how to successfully convey the content to their peers.

In the case of the Libyan teacher education curricula, it is insufficient for future teachers to incorporate sustainability in their teaching practice if the administration subsequently hinders them from working on projects and extracurricular activities. To make sure that environmental issues are taken into consideration and that teachers are competent to impart environmental knowledge to their students, the educational policy needs to be reviewed on a regular basis and undergo active transformation. Additionally, EFL university instructors should design environmental-related teaching materials and activities. They should also mentor, support, and encourage their students in creating these materials, (Durrani et al., 2019).

All things considered, continued efforts are required to raise the preservice teachers' level of environmental literacy and provide them with the methods they need to successfully integrate environmental education into their future classrooms. This calls for incorporating environmental sustainability issues into the curriculum and reviewing them. Curriculum development should address contemporary issues like recycling, natural catastrophes, and littering, (Mashaba et al, 2022) so that "the millennials and Generation Z can understand what is needed to control such adverse climate change conditions" (p. 5). Furthermore, environmental sustainability education ought to be spread throughout society as well as in classrooms. This suggests that in order to increase public awareness of the value of environmental protection, the ministries of education and the environment, as well as civic society organizations, non-governmental organizations, municipalities, and local residents, can adopt a variety of strategies, including using the media and public and social gatherings.

## **7. CONCLUSION AND RECOMMENDATIONS**

The purpose of this study was to investigate the implementation of integrating environmental sustainability into the preservice EFL teachers teaching methods course. Since Libyan educational faculties do not offer

pre-service teachers the opportunity to deepen their understanding of environmental sustainability, the results of the research demonstrated that the majority of preservice teachers thought their teaching experience had been useful and successful. They said that they enhanced their academic skills, autonomy and life skills. In addition to developing their social responsibilities and teaching abilities, they also modified their daily routines. Even if these might only be slight behavioral adjustments made by the preservice teachers, it is obvious that their involvement in the micro teaching tasks had a significant influence on the development of their pro-environmental attitudes. The significance of environmental sustainability integration in teacher education programmes is reinforced by the preservice teachers' reflections and work produced throughout the teaching methods course. In conclusion, incorporating environmental sustainability into teacher preparation programmes is crucial to create responsible, environmentally concerned citizens. Future teachers will be prepared to include environmental sustainability into their lessons by receiving training and developing their knowledge and abilities.

Based on the findings of this research the following recommendations and implications were generated for policy makers, educators, and researchers:

- Environmental sustainability should be promoted more strongly at all stages of education.
- Professional training programmes on the environmental education for preservice and in-service teachers should be designed and delivered.
- Reviewing and updating teacher education curricula is necessary, with an emphasis on enhancing practical tasks.
- Making Environmental education a mandatory module for preservice teachers. As a result, all teachers will be able to incorporate EE information into their lessons with more ease and preparation.
- Preservice teachers should participate in environmental campaigns and community events as well as read books, articles, watch films, attend webinars and workshops, and other professional development opportunities to improve their environmental education teaching techniques.

## 8. FUTURE RESEARCH

The findings of the current study will lead to future research in Libya about in-service teachers' attitudes towards integrating the environmental issues in their classrooms. In addition, curricula at the teacher education programmes and in-service professional development opportunities are necessary to be analyzed to identify ways to integrate environmental education in teacher training. Future studies on the methods used by university teachers to teach environmental education are also recommended.

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