

Education for Sustainable Development: Academic Teachers Challenges

Prof. Dr. Edhah Numan Khazaal

International Economic Relation Dep, College of Political Science, Al-Nahrain University Baghdad/ Iraq

ABSTRACT: The term "education for sustainable development" (ESD) refers to learning that fosters improvements in knowledge, abilities, attitudes, and values in order to build a more sustainable future for all. The study tries to shed light on the difficulties faced by academic instructors in the field of education (TE) when putting Education for Sustainable Development (ESD) into practice. The participants of this study were the academic teachers currently teaching in the college of political science at Al-Nahrain University, and 25 were chosen as sample for this study in the academic year 2023-2024. The instruments of this study were a questionnaire and an interview questions. The questionnaire consists of 10 items to clarify whether the academic teachers have any idea about ESD design activities. The interview consists of 6 items about the teacher's idea and role concerning sustainable development. The findings indicated that academic teachers really face many challenges with the concept of SD and ESD, they have no idea about (ESD), they haven't use this strategy in their teaching, moreover it is not familiar to our students, and it is hard to evaluate Education for Sustainable Development (ESD). It also recommends more research aimed at determining the requirements for teacher preparation programs designed to improve teachers' understanding of ESD.

KEYWORDS: Academic teachers; Sustainable development; Education for sustainable development

1. INTRODUCTION

The 21st century is characterized by a dual challenge preparing students for the future while preserving the planet for their future. The United Nations Decade of Education for Sustainable Development (2005–2014), of which UNESCO is the lead agency, aims to integrate the principles, values, and practices of sustainable development into all aspects of education and learning in order to address the social, economic, cultural, and environmental issues of the twenty-first century.

The concept of ESD emerged to solve the world's rising ecological, social and economic issues. For this purpose, teacher education plays its role in accomplishing its objectives that incorporate critical and systematic insight, collaborative decision-making, and accountability among current and future generations.

The goal of UNESCO's ESD for 2030 education program is to bring about the societal and personal transformation required to reverse course. Sustainable development is defined as development that satisfies present demands without endangering the ability of future generations to fulfill their own. To achieve the highest level of sustainability, education is essential.

One of the key critical areas of the recent education sustainability issues is the challenges of the ESD program faced by academic teachers, particularly in implementing ESD when this new program was first rolled into the college ecosystem (Nousheen et al., 2020).

Building society's capacity to confront some of the most pressing societal challenges of our day requires education, and education for sustainable development (ESD) in particular (Agbedahin, 2019; Holfelder, 2019).

1. The Problem

It is still unclear to many people including educators "what sustainability is and why it matters". Because of this, it could be challenging to incorporate ESD into the educational system because teachers might not completely get the idea and its applicability. In order to overcome this obstacle, information about sustainability and its significance that is understandable and accessible to educators and decision-makers must be made available. However, in order to successfully incorporate ESD into the educational system, a number of issues must be resolved. A lack of knowledge about sustainability, a lack of tools and support for ESD, a failure to integrate ESD into the curriculum, a lack of teacher preparation, a low level of student involvement, a lack of assessment and evaluation, and a lack of cooperation and partnerships are some of these difficulties. (Dahlin, Jon-Erik, 2020)

ESD often necessitates a reevaluation of the physical and interactive learning environment; standard methods of content delivery are insufficient to inspire students to act responsibly and learn new material (Brandt et al., 2021).

In order to help students live in a sustainable society, academic teachers can foster critical thinking as well as values and beliefs (Nousheen, Waseem, & Khan, 2020).

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2. The Significant

The main goals of "Education for Sustainable Development" are to develop a person who can address global environmental issues and to encourage the establishment of sustainable societies.

Although education for sustainable development (ESD) has drawn a lot of attention, it can be difficult to incorporate ESD into current educational systems.

As we work to build a more sustainable future for everybody, education for sustainable development, or ESD, is becoming more and more crucial. However, in order to successfully incorporate ESD into the educational system, several of issues must be resolved. Kunzli, Bertschy, and Lehmann (2013) .

ESD is a component of lifelong learning at all levels, including formal, non formal, and informal education; it is not just for educational institutions (Calderon et al., 2020).

Globally, urgent social, economic, and environmental issues can be addressed with a comprehensive framework thanks to the Sustainable Development Goals (SDGs). They are intended to serve as a shared road map for governments, organizations, and people to collaborate toward a more just, prosperous, and sustainable future. They are intended to direct worldwide efforts to achieve sustainable development by 2030.

3. Aim of the Study

The study aims to clarify teachers' challenges in Technology Education (TE) when implementing Education for Sustainable Development (ESD). The study aims to explore the challenges of ESD experienced by academic professors.

4. Research Question

1. What are the challenges that faced by academic teachers when implementing education for sustainable development knowledge among teachers?

5. Research limitations

This research is limited to a case study of the chosen academic colleges Professors at Al-Nahrain University in Iraq for the academic year 2023-2024.

2. THEORETICAL BACKGROUND

2.1. What is Sustainable Development?

The word "sustainable" comes from the Latin word "sustinere," which means to continue existing. It suggests output or ongoing assistance. Meeting societal needs in a way that won't permanently damage or deplete the environment is the aim of sustainable development. (Jyoti Mishra, 2017)

The goal of sustainable development is to meet the demands of the present without compromising the ability of future generations to meet their own requirements. It's a method of approaching development and progress in people. (United Nations General Assembly, 1987, page 43)

It can be defined as a plan for a country's economic development without compromising the quality of the environment for future generations. In 1987, the United Nations General Assembly stated that it "provides a framework for the integration of environment policies and development strategies." However, scholars contended long before the 20th century that advancement in the economy and environmental sustainability did not always have to conflict.

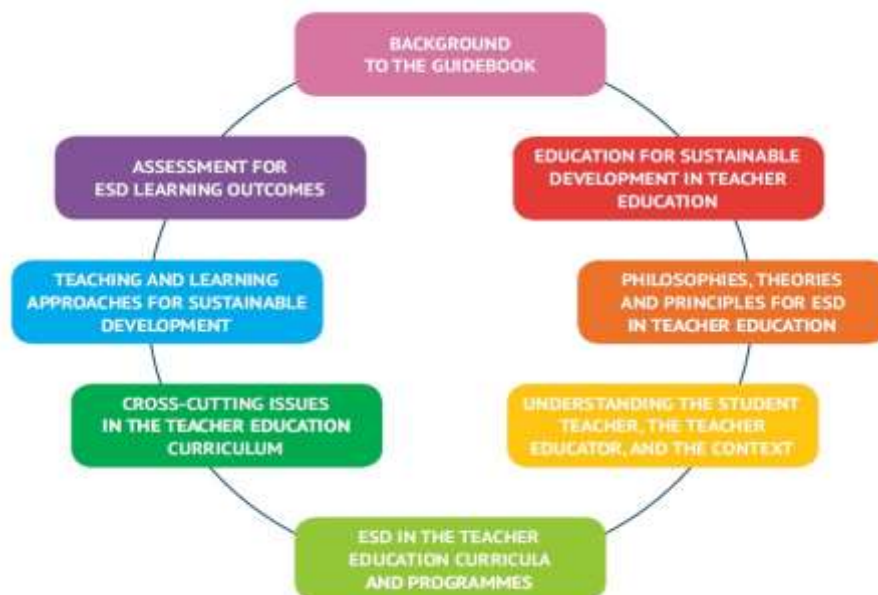
Education for sustainable development (ESD) is "considered crucial to building a sustainable future and to placing young people at the center of development" and should be supported. (Wals, 2013, p. 5)

2.2. Education for Sustainable Development

ESD is a holistic approach to education that aims to empower people to create a more sustainable future for themselves and the planet. It includes all of the information, abilities, attitudes, and values required to make wise choices on sustainable development. Education for Sustainable Development (ESD) aims to create a fair society for the present and the future, while also maintaining environmental integrity and economic viability. According to UNESCO, ESD is an educational program that prepares students to make responsible decisions.

"Teachers in all educational settings can inspire students to transform themselves and society by assisting them in understanding the difficult decisions that sustainable development demands" (UNESCO 2020, p. 30).

"Students who receive an education for sustainable development are better equipped to make informed decisions and act responsibly for the preservation of the environment, the health of the economy, and the fair treatment of all people, while also honoring cultural diversity."



UNESCO 2018

Students need new perspectives in order for them to understand a world that is changing rapidly. They must participate in this world as well. Among their other primary objectives are poverty reduction, environmental preservation, and the promotion of an inclusive society. To achieve this, a novel approach to education will be required.

2.3. Sustainable Development Goals

In order to end poverty, protect the environment, and ensure that everyone lives in peace and prosperity by 2030, the United Nations adopted the Sustainable Development Goals (SDGs), also known as the Global Goals, in 2015.

- To satisfy the needs of the current generation without compromising the environment's quality for coming ones.
- To promote development that reduces adverse effects on the environment.

2.4. Importance of Education for Sustainable Development

The goal of the educational approach known as "education for sustainable development" is to enhance students' morals, competencies, and understanding in preparation for the transition to a just and sustainable society.

People need education for sustainable development because it helps them see and react to the complex interactions that exist between the social, economic, and environmental systems. It is imperative to foster a global sense of solidarity. It enables individuals to engage in sustainable growth and critically assess their own actions. This involves allowing people the flexibility to think about sustainable development issues and form their own opinions, not telling them how to think or behave (Rieckmann 2018; Wals 2015). ESD is crucial to both a lifetime learning process and a top-notch education. It consists of the actual learning, pedagogy, and learning objectives.

2.5. Teacher's Role in (ESD)

In Iraq, the use of instructors to teach ESD in higher education is still relatively new. Theoretical understanding and effective teaching strategies for ESD are inadequate among educators worldwide (Pavaloaia et al., 2019).

Iraq needs high-quality teacher education desperately. It is now well accepted that the best approaches to raise students' learning outcomes are through high-quality instruction, particularly when it comes to instructors' capacity to inspire and support such learning.

There are instances when educators think that ESD has more to do with content than pedagogy (Mula et al., 2017). Furthermore, according to Rieckmann (2019), university instructors generally don't understand the requirements, constraints, context, meaning, and implementation of ESD.

Teachers should serve as positive role models for their students in order to promote the development of values in them. Thus, teacher education is a useful instrument and one of the finest ways to accomplish the goals of sustainable development. Because a teacher's training determines their quality, teacher education programs produce highly qualified teachers who promote student-centered learning and lifetime learning.

3. METHODOLOGY

3.1. Design

A qualitative research approach has been used for this study to find out academic teachers' challenges who actively engaged ESD in their colleges.

3.2. The Population and Sample of the Study

The population of the study was academic teachers from four departments in the College of Political Science at Al-Nahrain University. The sample was 25 academic teachers chosen by purposive for the academic year 2023-2024.

3.3. Instrument

The researcher used two instruments namely: a questionnaire and an interview to determine the teacher's in (ESD)

a. Questionnaire

The researcher conducted questionnaires to the academic teachers. The questionnaire consisted of 10 Closed-ended questions to clarify whether academic teachers have any idea about ESD design activities and the challenges they face. The responses are categorized into "yes, or No" answer. (See Appendix A)

b. An interview

An interview was used as an instrument in this study to determine the academic challenges towards education for sustainable development. The interviews were tape-recorded and varied in time from 10-15 minutes.

It consists of 6 questions about academic teacher's point of view of sustainable development, and how the informants conduct this commission in their daily teaching. The research data were gathered and analyzed. (See Appendix B)

3.4. Procedure

At the end of the second semester, the researcher distributed the questionnaire paper to each participant personally. Each participant was asked to complete all the questionnaires items once. They were strongly encouraged to fill out the questionnaire's items, the responses based on Dichotomous Scales, and answers with "Yes, or No."

The researcher was given 30 minutes to complete answering the questionnaire without mentioning their names. The results were collected and analyzed accordingly.

3.5. The Pilot Study

The pilot study was done to determine if the questionnaires were suitable, and reliable. It was conducted by selecting 5 academic teachers chosen randomly from the same population. The result of the pilot study showed that most of the academic teachers agreed that they faced a lot of challenges in (ESD).

3.6. Validity and Reliability of the Study

To ensure the validity of this study, the researcher checked the questionnaire by asking some expert professors to evaluate and check the suitability of the questionnaire's items. They approved that the items were suitable and valid.

To estimate the reliability of the questionnaires, the scale reliability was used to measure the reliability of academic teacher questionnaires. The results showed that the reliability of the instrument was estimated at 0.942, using 'Cronbach's alpha reliability coefficient.

4. RESULTS AND DISCUSSIONS

4.1. The Results

The study was to clarify academic teachers' challenges in education when implementing Education for Sustainable Development (ESD).

The researcher collected the obtained data obtained from the questionnaire sheets answer, and analyzed them statistically. See Appendix (A)

We can notice that only (8.8%) have an idea about the term sustainable development (SD) and 10.33% haven't any idea about it.

In item 2 (10.22%) agreed that sustainable development is necessary for education, while (4.17) they didn't agree.

In item 3 (5.15%) agreed that sustainable development applies to all spheres of activity, while (6.21%) don't agree.

In item 4 (5.14%) agreed that they used Education for Sustainable Development (ESD) in their class, while (7.20%) they didn't agree.

In item 5 (10.8%) agreed that the concept sustainable development is relevant to their discipline, while (9.29%) didn't agree.

In item 6 (12.19%) agreed that (ESD) affect their selection of teaching methodology, while (8.59%) didn't agree.

In item 7 (14.14%) academic teachers agreed that they have difficulties and challenges with implementing (ESD) in their class, while only (7.32%) they didn't agree.

In item 8 (6.22%) agree that sustainable development (ESD) familiar to our students, while (15.25%) didn't agree.

In item 9 (9.52%) agreed that (ESD) can be applied in all levels of study, while only (8.35%) didn't agree.

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In item 10 (7.10%) agreed that it is easy to evaluate about Education for Sustainable Development (ESD), while (6.29%) didn't agree.

4.2. Discussion

Due to the results of the study and analysis of the data, it was found that the highest responses of academic teachers were in item 7 that (14.14%) academic teachers' professors' encountered moderate to serious difficulties when instructing ESD which indicates the higher responses.

It was found in item 6 that (12.19%) of the respondents agreed that the use of Sustainable Development (ESD) affects their selection of teaching methodology, while (8.59%) didn't agree.

Similar to item 2 (10.22%) agreed that sustainable development is very importance in education. In return the lowest response was (4.71%) that most of the participants didn't agree that sustainable development necessary for education.

The second lowest responses were in item 3 that (6.21%) don't agree that sustainable development applied to all spheres of activity. The most serious responses in item 1 that that (10.33%) have any idea about Education for Sustainable Development (ESD)

It is also found that the responses in item 7 were (7.32%), which means that very few don't have any difficulties and challenges with implementing (ESD) in their class.

In item 8 only (8.35%) of the participants think that ESD can be applied in all levels of study, in item 6 only (8.59%) don't agree that sustainable development (ESD) affects your selection of teaching method.

The results show that most of academic teachers weren't familiar with (ESD), and they haven't provided them with any training before.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

The results lead us to the conclusion that attaining sustainability requires the implementation of Education for Sustainable Development (ESD).

Low motivation to adopt (ESD) design activities, a lack of teaching materials, and a lack of understanding of (ESD) and design are the main obstacles that academic teachers experience while implementing ESD design activities.

Academic instructors must get specific training and instruction on the problems and concerns related to sustainability. To improve the state of handling sustainability in a multicultural setting, developing lesson plans and materials is crucial, in addition to offering instructors training.

Moreover, interview results discovered that have little idea about sustainable development, and they faced many difficulties in implementing ESD classes.

5.2. Recommendations

The following are suggested by the researcher:

1. More emphasis should be needed for education programmes to reflect the importance of Sustainable Development (ESD).
2. Academic teachers should put their knowledge of the significance of sustainable changes in our lives into practice through workshops that involve collaboration between academics from different disciplines.
3. ESD must be embedded in the continuum of teacher education.
4. Academic teachers are requested to engage in professional development in (ESD).

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Appendices

Appendix A

Academic Teachers' Questionnaire

Dear Academic Teacher,

Kindly requested to answer the questionnaire's items, please, Put (✓) to the degree of agreement and (✗) for disagreement to the statement you think most appropriate.

Time: 30 minutes

Questions' Items	Yes	NO
1. Do you have any idea about Education for Sustainable Development (ESD)	8.8%	10.33%

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2. Is sustainable development necessary for education?	10.22%	4.71%
3. Does sustainable development apply to all spheres of activity?	5.15%	6.21%
4. Have you ever used Education for Sustainable Development (ESD) in your class?	5.14%	7.20%
5. Do you think the term sustainable development is relevant to the discipline you teach?	10.8%	9.29%
6. Did Sustainable Development (ESD) affect your selection of teaching methodology?	12.19%	8.59%
7 Do you have difficulties and challenges with implementing of ESD in your class?	14.14%	7.32%
8. Is sustainable development (ESD) familiar to our students?	6.22%	15.25%
9. Do you think that ESD can be applied in all levels of study?	9.52%	8.35%
10. Do you think it is easy to evaluate Education for Sustainable Development (ESD)?	7.10%	6.29%

Appendix B

Academic Teachers personal interviews Questions

No	Interview Questions Items
1	How do you understand Education for Sustainable Development (ESD)?
2	How do you perceive your role as an educator regarding sustainable development?
3	What can I do, as an academic teacher, for development to be more sustainable?
4	What do you think about the implementation of ESD in your class or college?
5	What kind of topic/theme do you deal with as ESD in your class?
6	What can I do, as an academic teacher, for development to be more sustainable?

التعليم من أجل التنمية المستدامة: التحديات للأساتذة الأكاديميين
الاستاذ الدكتور ابراهيم نعمان خزل / كلية العلوم السياسية / جامعة النهريين
الملخص

يشير مصطلح "التعليم من أجل التنمية المستدامة" (ESD) إلى التعلم الذي يعزز التحسينات في المعرفة والقدرات والمواقف والقيم من أجل بناء مستقبل أكثر استدامة للجميع. تحاول هذه الدراسة تسليط الضوء على الصعوبات التي يواجهها الاساتذة الأكاديميون في مجال التعليم عند وضع التعليم من أجل التنمية المستدامة موضع التنفيذ. تكونت عينة المجتمع للدراسة جميع الاساتذة الأكاديميين الذين يدرسون حالياً في كلية العلوم السياسية في جامعة النهريين، وتم اختيار 25 منهم كعينة لهذه الدراسة للعام الدراسي 2023-2024

اما أدوات هذه الدراسة فكانت عبارة عن اداتين هما: الاستبيان و اجراء مقابلة مباشرة مع الاساتذة . وتكون الاستبيان من (10) فقرات صممت لتوضيح ما إذا كان لدى الاساتذة الأكاديميين أي فكرة عن أنشطة التصميم البيني والتنمية المستدامة. في حين تكون استبيان المقابلة المباشرة من (6) فقرات تتمركز حول دور الاستاذ وفكرته عن كل مايتعلق بالتنمية المستدامة.

حيث اشارت النتائج إلى أن الاساتذة الأكاديميين يواجهون بالفعل العديد من التحديات مع مفهوم التنمية المستدامة والتعليم من أجل التنمية المستدامة، فليس لديهم فكرة عن (التعليم من أجل التنمية المستدامة)، ولم يستخدموا هذه الاستراتيجية في تدريسهم، وعلاوة على ذلك فهي ليست مألوفة لدى الطلبة، وكذلك يصعب تقييم التعليم من أجل التنمية المستدامة،

وقد أوصت الدراسة بإجراء المزيد من البحوث التي تهدف إلى تحديد متطلبات برامج إعداد الاساتذة والمصممة لتحسين فهم التدريسيين لمفهوم التعليم من أجل التنمية المستدامة.



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