

## Teacher Educators' Integrating Moral Practices in Higher Education Pakistan for Promoting 2030 ESD Agenda

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### Abstract

This study explores the moral dimension of Education for Sustainable Development (ESD) of teacher educators. Under the pragmatism paradigm researcher used a convergent mixed-methods design that combined both quantitative and qualitative methods. The research tools were used questionnaire and semi-structured interview protocol. Eight public sector universities from one province in Pakistan which are offering teacher education programs were selected target population for the study. For the quantitative data collection, a census technique was used, including all 316 teacher educators. An adapted questionnaire was used to collect the data, and its validity and reliability were ensured through exploratory and confirmatory factor analyses. For the qualitative data collection, purposive sampling was used. Data collected from 35 teacher educators through semi-structured interviews. These interviews provided a deeper conception of moral dimension of ESD. The qualitative data were analyzed by using thematic analysis and descriptive statistics for the quantitative data. The study findings revealed that teacher educators who had studied an ESD course during their graduate period, or conducted research on ESD, and taught the program had a more holistic and comprehensive understanding of ESD compared to their

counterparts who did not participate in these activities. It also showed that their conceptions about moral dimensions of ESD was moderately developed. Although majority teacher educators were not explicitly aware of the moral dimension but they naturally incorporated moral values into their everyday teaching.

**Keywords:** *Sustainable Development, Education for Sustainable Development, ESD Conceptions, Moral Dimension, 2030 ESD Agenda.*

## Introduction

The 2030 Agenda for Sustainable Development underscores the critical need for transformative education systems that address global challenges through a holistic approach to sustainability. Education for Sustainable Development (ESD) serves as a cornerstone for this agenda, fostering knowledge, skills, attitudes, and values that empower individuals and communities to contribute effectively to sustainable development. In this context, teacher educators play a pivotal role, as they are tasked with equipping future educators with the competencies required to promote sustainable practices. Beyond imparting technical and theoretical knowledge, teacher educators are also moral agents responsible for integrating ethical values that underpin sustainable development.

In Pakistan, the relevance of ESD is profound, given the nation's pressing issues such as environmental degradation, socio-economic disparities, and gender inequality. While strides have been made in addressing the economic, social, and environmental dimensions of ESD, the moral dimension remains underexplored within higher education frameworks. This moral dimension emphasizes fostering values such as integrity, equity, and responsibility, which are critical for promoting sustainable behaviors and decision-making aligned with the 2030 ESD agenda.

This study explores how teacher educators in Pakistan perceive and integrate moral practices within their teaching to advance the 2030 ESD agenda. Through a mixed-methods approach, it examines their understanding of moral values in the context of sustainability, the strategies they employ to embed these values in their pedagogical practices, and the challenges they face in doing so. By addressing this

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gap, the study highlights the transformative potential of incorporating moral practices into teacher education, ultimately contributing to the cultivation of ethically responsible educators capable of guiding future generations toward a sustainable future.

By placing the moral dimension of ESD at the forefront, this research offers valuable insights into how higher education in Pakistan can align with the 2030 agenda. It underscores the need for a comprehensive approach to teacher education that not only prioritizes sustainability competencies but also instills the ethical foundations necessary for fostering long-term sustainable development.

### **Literature review**

The concept of Sustainable Development (SD) has evolved significantly since its introduction in the late 20th century. Initially, it focused on addressing the environmental and economic challenges of development, with particular emphasis on environmental preservation and economic equity. However, the moral dimension, an essential facet that deals with ethics, values, and responsibilities, has emerged as a vital element in achieving sustainability. This review synthesizes existing literature on the moral dimension of sustainable development, highlighting its importance in education, the role of teacher educators, and how it can be integrated into the broader sustainability discourse.

### **Understanding the Moral Dimension in Sustainable Development**

The moral dimension of sustainable development is concerned with the ethical values and principles that guide human behavior toward achieving sustainability. It reflects the need for individuals and societies to act responsibly and equitably, recognizing the rights and needs of both present and future generations. Arthur Pawłowski (2011) argued that sustainable development cannot be fully realized without incorporating moral values, emphasizing that these values should guide decisions on resource use, environmental protection, and societal progress. He further highlighted the ethical responsibility to ensure intergenerational equity, where current actions do not compromise the well-being of future generations.

Busoi (2014) stressed that moral responsibility is a core component of SD, connecting environmental, economic, and social dimensions. His

work demonstrated that sustainability should not only focus on technical and scientific solutions but also on the ethical choices individuals make in everyday life. He asserted that ethical behavior towards the environment and society is fundamental to achieving sustainable development, as it shapes the way individuals and communities interact with resources, ecosystems, and each other.

### **The Role of moral dimension in Education for Sustainable Development (ESD)**

Education for Sustainable Development (ESD) is central to promoting the moral dimension of sustainability, as it seeks to instill ethical values and sustainable practices in learners. The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2014) has emphasized the role of education in fostering ethical thinking, critical reflection, and responsible action toward sustainability. ESD encourages learners to think beyond their immediate environment and consider the broader ethical implications of their actions on society, the economy, and the planet.

In the context of teacher education, the moral dimension of ESD becomes particularly significant. Teacher educators play a crucial role in preparing future educators who will influence the next generation's attitudes and behaviors towards sustainability. According to Busoi (2014), without a focus on moral and ethical values, the teaching of sustainable development is incomplete, as it neglects the essential component of personal and social responsibility. The inclusion of the moral dimension in teacher education ensures that pre-service teachers not only understand sustainability from a theoretical perspective but also embody the ethical principles necessary to promote it in their classrooms and communities.

### **Conceptions of Teacher Educators Regarding the Moral Dimension**

Teacher educators' understanding of the moral dimension of sustainable development is critical in shaping the quality of ESD delivered in schools and universities. Various studies have explored how teacher educators perceive their role in teaching the moral aspects of sustainability. Stables and Scott (2012) pointed out that many educators still view sustainability primarily through the lens of environmental education, often overlooking the ethical responsibilities tied to social and economic aspects. This

narrow focus on environmental issues, they argued, limits the potential of ESD to foster a holistic understanding of sustainability.

Khadim et al., (2021) supported this view, stating that while environmental concerns are a core aspect of ESD, the moral and ethical dimensions are equally important. Their research demonstrated that teacher educators often lack a comprehensive understanding of the moral dimension, focusing more on practical aspects of sustainability, such as environmental protection, without fully engaging with the ethical questions that underpin these practices. Khadim et al., (2023) highlights the need for further professional development and curriculum reform to better equip educators with the tools to integrate moral values into sustainability education.

In contrast, findings from Caiado et al., (2018) revealed that some teacher educators possess a more integrated understanding of ESD, acknowledging the moral dimension as fundamental to achieving sustainability. Khadim et al., (2024) study found that educators who had been exposed to courses or research on ESD were more likely to adopt a holistic approach, incorporating ethical considerations into their teaching. These educators emphasized the importance of critical thinking, ethical decision-making, and fostering a sense of responsibility in their students.

### **Moral Dimension and its Connection with Other SD Dimensions**

The moral dimension of sustainable development intersects with the social, economic, and environmental dimensions, forming a cohesive framework for addressing sustainability challenges. According to Salvia (2019), the moral dimension provides the ethical foundation that underpins sustainable practices in these areas. For instance, environmental ethics guide decisions related to resource conservation and ecosystem protection, while social and economic ethics address issues of equity, justice, and poverty reduction.

Several scholars have argued that the moral dimension should not be treated as a separate or secondary consideration but rather as an integral part of all sustainability efforts. Stables and Scott (2012) noted that without an ethical framework, the goals of sustainable development—such as reducing poverty, promoting social justice, and protecting the

environment—cannot be fully realized. This view is supported by Pawłowski (2011), who asserted that the moral dimension ensures that sustainability efforts are grounded in principles of fairness, respect for human dignity, and care for the natural world.

### **Challenges in Integrating the Moral Dimension into ESD**

Despite the growing recognition of the importance of the moral dimension in sustainable development, its integration into ESD faces several challenges. One of the primary obstacles is the lack of awareness among educators about the ethical implications of sustainability. Many educators, particularly in developing countries like Pakistan, may not have received formal training on ESD, leading to a limited understanding of its moral and ethical components. Studies by Irwin (2012) and Rampasso (2019) have shown that educators often prioritize environmental issues, neglecting the broader ethical responsibilities associated with sustainability.

Furthermore, the existing curriculum in many educational systems does not adequately address the moral dimension of sustainable development. Ramzan and Khan (2020) highlighted the need for curriculum reform to include explicit references to ethics and moral responsibility in relation to sustainability. They argued that without such reforms, the moral dimension will continue to be underrepresented in ESD, limiting its effectiveness in fostering responsible global citizens.

### **Research Objective**

- To explore how teacher educators in higher education institutions in Pakistan integrate moral practices into their teaching to promote the 2030 Agenda for Sustainable Development.

### **Research Question**

- How teacher educators in higher education institutions in Pakistan integrate moral practices into their teaching to promote the 2030 Agenda for Sustainable Development?

### **Methodology**

This study adopted a convergent mixed-methods design within the pragmatism paradigm to examine teacher educators' conceptions about the moral dimension of Education for Sustainable Development (ESD).

Quantitative and qualitative data were collected concurrently to achieve a comprehensive understanding of the subject. Quantitative data were obtained through an adapted questionnaire administered to 316 teacher educators from eight public universities, while qualitative insights were gathered via semi-structured interviews with 35 purposively selected educators. The validity and reliability of the questionnaire were established through exploratory and confirmatory factor analyses, and descriptive statistics were employed for quantitative data analysis. Thematic analysis of the interview data revealed key themes, providing deeper insights into educators' views on the moral aspects of ESD.

The integration of both data sets during the interpretation phase allowed for a robust comparison of trends and themes, resulting in a more holistic understanding of the moral dimension in teacher education. The study adhered to ethical guidelines, ensuring informed consent, confidentiality, and anonymity for all participants. The convergent design facilitated a thorough exploration of the moral dimension in ESD, revealing both implicit and explicit integration of moral values in the teaching practices of the participants.

## Analysis and Findings

### Integration of Moral dimension in through teaching

This thematic analysis is based on the participants' views regarding the integration of the moral dimension into sustainability education, with a particular focus on ethics.



## **Theme 1: Ethics as a Core Aspect of the Moral Dimension**

In sustainability education, **ethics** emerged as the central pillar of the moral dimension, highlighting its critical role in shaping the values and behaviors of pre-service teachers. Participants emphasized that ethics is not merely a theoretical concept but a practical framework guiding individuals toward responsible and moral actions.

### **Ethics as the Foundation of Responsibility**

Participants widely agreed that pre-service teachers must internalize ethical principles to fulfill their responsibilities effectively. Ethics was described as a set of behaviors and values encompassing:

- Respect for others' rights and dignity.
- Honesty in actions and intentions.
- Peace and the promotion of nonviolence.
- Democracy and the importance of equal participation.
- Care for others as a guiding principle in interactions.

For example, Participant 1 (P1) highlighted the ethical responsibility of respecting others, fulfilling their needs without harm, and promoting collective well-being. Similarly, Participant 5 (P5) echoed the necessity of instilling an understanding of ethical behavior that prioritizes others' well-being while avoiding harm.

### **Integration of Universal Ethical Values**

Participants emphasized the importance of embedding universal ethical values into their teaching. These included:

- Equity and fairness, ensuring impartiality in all contexts.
- Multicultural education, promoting understanding and respect for diverse cultures.

Participant 8 (P8) specifically addressed democracy, respect, and the universal rights and responsibilities of human beings. Their perspective underscored ethics as a means of discerning right from wrong within different societal frameworks. Participant 12 (P12) further extended this by emphasizing moral responsibility for helping others, protecting the environment, and avoiding harmful actions. This perspective included



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refraining from behaviors such as abusive language and environmental degradation, fostering collective responsibility toward sustainability.

### **Ethics in Cultural and Religious Contexts**

A recurring theme was the connection between ethics, cultural norms, and religious values. Participants noted that ethical education is deeply intertwined with the sociocultural and national context. Participant 17 (P17) provided examples of how countries like Jordan, Japan, and Finland integrate moral education within their systems. They emphasized principles like:

- Respect for elders, reflecting cultural and religious traditions.
- Peace, as a universal value in creating societal harmony.
- Truthfulness, bridging secular and religious educational principles.

Similarly, Participant 20 (P20) highlighted the importance of ethics in shaping students' personalities, fostering respect for cultural customs, promoting peace, and preserving heritage. These values collectively contribute to societal welfare and sustainability.

### **Practical Applications in Education**

Participants consistently pointed out that ethics in sustainability education goes beyond abstract discussions, requiring active integration into practice. This includes:

- Encouraging pre-service teachers to model ethical behavior.
- Instilling a sense of collective responsibility for humanity and the environment.
- Promoting an ethical framework that prioritizes good deeds and prevents harm.

The participants identified ethics as the cornerstone of the moral dimension in sustainability education, underscoring its universality, cultural relevance, and practical significance. By fostering respect, fairness, and a sense of responsibility, sustainability education equips pre-service teachers to contribute to a more harmonious, equitable, and sustainable world.

## Theme 2: Moral Responsibility

Moral responsibility emerged as a critical component of sustainability education, emphasizing the role of pre-service teachers in fostering a sustainable and socially conscious society. Participants highlighted that teaching moral responsibility equips future educators to act in ways that benefit society and the environment while avoiding harm.

### Core Aspects of Moral Responsibility

Participants underscored that moral responsibility entails:

- Performing good deeds that contribute to societal and environmental well-being.
- Acting in the interest of others, ensuring that actions are guided by compassion and fairness.
- Avoiding harm, both to individuals and the environment.

For example, Participant 12 (P12) stressed that pre-service teachers must understand their responsibility to:

- Help others in need.
- Protect the natural environment.
- Refrain from causing harm through actions or inactions.

Similarly, Participant 17 (P17) elaborated on moral responsibility by focusing on tangible actions such as:

- Saving resources to ensure sustainable use for future generations.
- Promoting peace and fostering harmony in interpersonal and societal relationships.
- Collaborating with others to achieve shared goals in sustainability efforts.

### Moral Responsibility in Global Contexts

Several participants connected moral responsibility to practices in countries known for their robust moral education systems. Participant 17 (P17) referenced examples from nations like Jordan, Japan, and Finland, where moral education is central to fostering values such as:

- Resource conservation, reflecting a commitment to environmental sustainability.
- Social collaboration, demonstrating the value of working together for the greater good.
- Peacebuilding, essential for creating stable and harmonious societies.

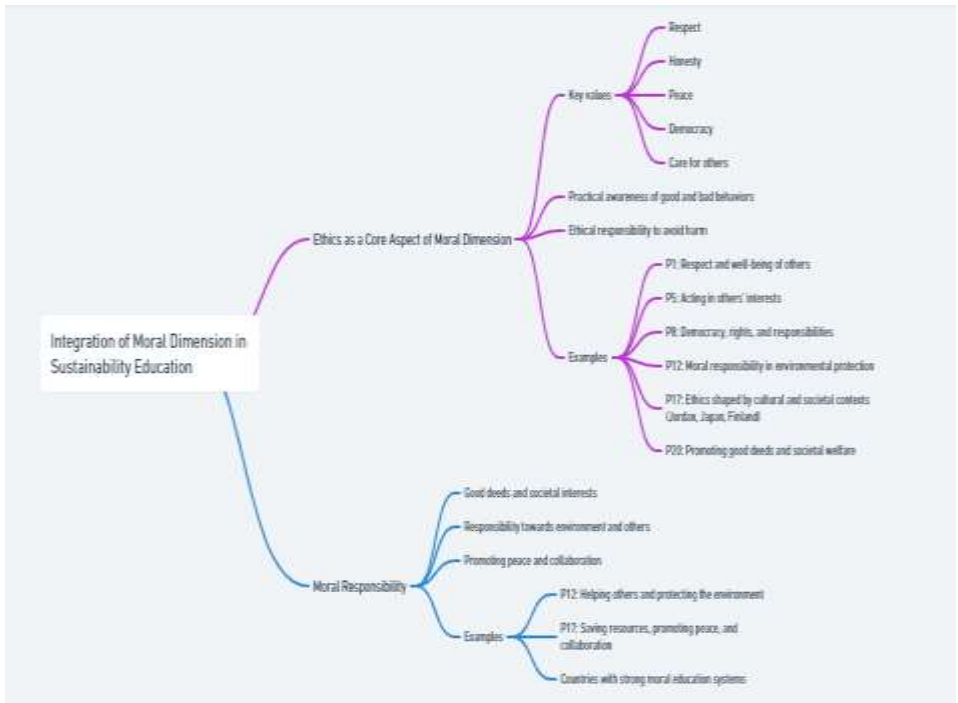
These global examples highlight the importance of embedding moral responsibility in education to promote sustainable development.

### **Practical Applications in Sustainability Education**

Participants emphasized that moral responsibility should be actively integrated into teaching practices for pre-service teachers. Key approaches include:

- Encouraging future educators to model responsible behaviors, such as recycling, energy conservation, and community engagement.
- Providing opportunities for pre-service teachers to engage in service-learning projects that focus on helping others and protecting the environment.
- Promoting an understanding of the long-term consequences of actions, fostering a sense of accountability for societal and environmental outcomes.

Moral responsibility is integral to sustainability education, requiring pre-service teachers to perform good deeds, act responsibly toward society and the environment, and avoid harm. By incorporating global examples and practical applications, sustainability education helps shape morally responsible educators who are prepared to contribute to a sustainable future.



The quantitative findings stated that only 54.9% teacher educators integrate moral dimension of ESD. The integrate through discussion method, practical example, role model, etc.

### Key Findings

Quantitative analysis showed that teacher educator integrated moral dimension 54.9% through their daily teaching. Similarly, many teacher educators raised concerns that the existing curriculum falls short in addressing Education for Sustainable Development (ESD), especially in relation to its moral dimension. They recommended that ESD be more clearly embedded into both the curriculum and teacher education programs to better equip future teachers with the skills needed to engage with sustainability issues in a more comprehensive and holistic manner.

### Discussion

The findings of this study underscore the critical role of moral practices in advancing Education for Sustainable Development (ESD) within higher education in Pakistan, particularly among teacher educators.

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Despite limited explicit awareness of the moral dimension of ESD, teacher educators were found to inherently integrate moral values such as respect, honesty, and fairness into their teaching practices. This suggests that moral values are implicitly embedded in the pedagogical frameworks used by teacher educators, even in the absence of formal training on the subject. Such practices align with the broader goals of the 2030 ESD Agenda, which emphasize fostering responsible citizenship and sustainable behaviors.

The study revealed that teacher educators with greater experience in ESD—gained through coursework, research, or teaching—demonstrated a more nuanced understanding of the moral dimensions of sustainability compared to their less experienced counterparts. The existing study highlights the pivotal role of professional experience and exposure to ESD in developing a comprehensive grasp of how ethical principles underpin sustainable development. Conversely, less experienced educators often relied on traditional pedagogical methods, demonstrating a lack of depth in integrating moral principles into their teaching. These findings emphasize the importance of targeted professional development opportunities to enhance teacher educators' capacity to address the moral aspects of sustainability intentionally and effectively.

A recurring theme throughout the study was the concept of moral responsibility, with teacher educators advocating for sustainability education that goes beyond environmental and social aspects to cultivate a strong sense of ethical accountability among pre-service teachers. This perspective resonates with Busoi (2014), who argued that ethical responsibility is indispensable for achieving sustainability. Teacher educators in Pakistan consistently emphasized that embedding moral values in ESD is essential for equipping future teachers with the competencies needed to address the multifaceted challenges of sustainable development.

However, the study also identified significant gaps in the current higher education curriculum regarding ESD, particularly its moral aspects. Many educators expressed concern that the curriculum does not adequately address the ethical dimensions of sustainability. They recommended a more explicit integration of ESD into teacher education programs to better prepare future educators for the complex demands of

sustainable development. This recommendation aligns with Viennet and Pont (2017), who called for curricula updates that incorporate ESD's moral, social, and environmental dimensions comprehensively.

Teacher educators in the study acknowledged that, while they were intuitively integrating moral values into their teaching, formal training on the ethical aspects of sustainability would enhance their ability to deliver more intentional and holistic ESD instruction. Professional development programs focused on moral education within the context of ESD could strengthen educators' capacity to foster critical thinking, ethical reasoning, and responsible citizenship among students, as advocated by Swain (2018) and Sang (2019).

Interestingly, this study contradicts some earlier research findings. For instance, Lima et al. (2023) reported that teachers predominantly emphasized the environmental aspect of sustainable development, neglecting the economic and social dimensions. Similarly, Martins et al. (2019) argued that teacher educators often viewed the economic and social dimensions as peripheral to sustainable development. In contrast, the present study highlights that teacher educators in Pakistan recognize the interconnection of all four dimensions—social, economic, moral, and environmental—underscoring their integral role in achieving the 2030 ESD Agenda.

The findings of this study emphasize the importance of moral practices in promoting ESD among teacher educators in Pakistan. By fostering a deeper understanding of the moral dimensions of sustainability through curriculum reforms and professional development, higher education institutions can better prepare educators to address the multifaceted challenges of sustainable development and contribute meaningfully to the 2030 ESD Agenda.

## **Conclusion**

The study highlights the critical role of moral practices in advancing Education for Sustainable Development (ESD) within higher education in Pakistan. Teacher educators, whether explicitly aware of the moral dimensions or not, inherently integrate ethical values such as respect, honesty, and fairness into their teaching. This underscores the potential of moral education as a cornerstone for achieving the 2030 ESD Agenda.

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However, the findings also reveal gaps in teacher educators' awareness and preparedness, particularly among those with limited experience in ESD, pointing to the need for professional development and curriculum reforms. By recognizing the interconnectedness of social, economic, environmental, and moral dimensions, teacher educators in Pakistan demonstrate a holistic approach to sustainability that aligns with global ESD goals.

### **The Way Forward**

To fully leverage the potential of teacher educators in promoting the 2030 ESD Agenda, few key actions are recommended.

- Higher education curricula should explicitly integrate ESD, with a particular focus on the moral dimensions. Targeted training programs should be designed to enhance teacher educators' understanding of the moral aspects of ESD. These programs could include workshops, seminars, and collaborative learning opportunities that emphasize practical strategies for integrating moral education into teaching.
- Education policymakers should prioritize ESD in national and institutional education agendas, ensuring that teacher education programs align with global sustainability goals. This includes allocating resources for curriculum updates and professional development initiatives.
- Further research is needed to explore effective strategies for integrating the moral dimensions of ESD into teacher education. Collaborative efforts between educators, researchers, and policymakers can foster innovation and share best practices for promoting sustainability.

By addressing these areas, higher education institutions in Pakistan can empower teacher educators to play a transformative role in advancing sustainable development. This holistic approach will ensure that future generations of educators are equipped to lead their students toward a more sustainable, ethical, and equitable future, aligning with the vision of the 2030 ESD Agenda.

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