

THE IMPACT OF SCHOOL LEADERSHIP ON EDUCATION FOR SUSTAINABLE DEVELOPMENT: EVIDENCE FROM PRIVATE SCHOOLS IN KARACHI, PAKISTAN

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Abstract

Education for Sustainable Development (ESD) demands effective school leadership to embed sustainability in schools' culture, curriculum and practices. This study explored the leadership qualities and leadership competencies of principals, ISA coordinators and teachers of the Catholic Board of Education (CBE), in the context of implementing ESD in Catholic secondary and lower secondary schools of Karachi. A case study design was used with 18 respondents who filled out Northouse's Leadership Traits Questionnaire (LTQ) and the Leadership Skills Inventory (LSI). Descriptive statistics (mean and standard deviation) were used for analysis. In general, the leadership competencies of principals were higher, with the ISA coordinators also having high scores across the combined competencies of collaborative leadership. The study concludes that collaborative leadership, good communication and good leadership skills are factors that can help in the effective implementation of Education for Sustainable Development. The results add to the sparse body of research surrounding the concept of 'sustainable educational leadership' in Pakistan and offer practical lessons for the development of educational leadership in schools.

Keywords: Education for Sustainable Development, School Leadership, Leadership Traits, Leadership Skills, Sustainable Development Goals, Connecting Classrooms Programme, International School Award.

INTRODUCTION

With the emergence of new challenges such as climate change, biodiversity loss, environmental degradation, poverty, social inequalities, and the rapid pace of technological advancement, learners' education systems must teach them not only to become knowledgeable but also capable, with the values and attitudes that enable them to take informed and responsible decisions. UNESCO (2020) sees education as a powerful tool to create a more sustainable and equitable future, and Education for Sustainable Development (ESD) is a strategy to ensure that learners can contribute to this goal. ESD is not a subject in its own right, but rather a whole-school approach to the integration of sustainability principles across the curriculum, teaching, school leadership and governance, and community engagement.

Education for Sustainable Development is reinforced by the United Nations Sustainable Development Goals (SDGs), specifically Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Target 4.7 focuses on all learners developing the knowledge, skills, values and behaviours needed to promote sustainable development, global citizenship, cultural diversity, peace and environmental responsibility (United Nations, 2015). To attain these goals, schools must go beyond the current approaches to teaching and learning to establish learning environments that promote critical thinking, group work, innovation and responsible action. However, successful implementation of the ESD requires not only curriculum reform but also effective leadership in the school which can guide the school to change itself and promotes sustainability culture.

School leadership is one of the most significant school-level factors that impact the quality of education, the effectiveness of the schools, teacher motivation, and student achievement (Hallinger, 2020; & Leithwood et al., 2020). Modern viewpoints on educational leadership go beyond administrative leadership to include instructional, transformational, distributed, and sustainable leadership (Harris, 2020; Hargreaves & Fullan, 2020).

ESD implementation has also been enhanced by the international

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educational efforts to promote the participation of schools in global issues and to build leadership capacity and intercultural understanding. One of the most key of these programmes has been the British Council's Connecting Classrooms Programme, which has been key to advancing global citizenship, sustainable development, and international cooperation by fostering connections between schools in various nations. The programme aims to inspire teachers and students to solve problems in the world by creating projects related to the Sustainable Development Goals, promoting leadership, innovation and cooperation in learning. Many schools involved in the programme continue to seek the International School Award (ISA) for above outstanding work in the incorporation of international dimension into school improvement and teaching. The implementation of Education for Sustainable Development has become more popular in Pakistan since the country has accepted the Sustainable Development Goals, but implementation is not consistent because of the limitations of institutional capacity, professional development opportunities, availability of resources and the lack of integration of policy (Kalsoom et al., 2017; Saqib et al., 2020).

The research related to sustainability awareness at the university level, teacher education, and curriculum development has been primarily focused, and empirical studies on how school leadership can foster and maintain ESD processes and practices in primary and secondary schools have been largely overlooked. The Catholic Board of Education (CBE), Karachi, offers a wonderful educational setting to explore these questions. Catholic secondary (and lower secondary) schools have engaged in a variety of activities as part of the British Council's Connecting Classrooms Programme and the International School Award, aimed at embedding sustainable development, global citizenship, intercultural understanding and community engagement in their learning. For this reason, this series of activities demands effective collaboration between principals, International School Award (ISA) coordinators and teachers and therefore schools that participate in this kind of activity are suitable for analysing leadership

characteristics that facilitate the good implementation of Education for Sustainable Development. Leadership effectiveness has been a topic that has been widely studied both in terms of leadership traits and leadership skills.

Leadership traits are personal attributes that are relatively stable and consist of, among others, 'communication, confidence, determination and trustworthiness', whereas leadership skills are learnable through education, professional learning and experience, and consist of, for example, 'knowledge of social media, interpersonal skills and communication, and the ability to manage time and time pressure' (Northouse, 2022). A holistic view of the impact of school leadership on organisational change and educational innovation is obtained by analysing both dimensions. The study thus explores the leadership attributes and leadership skills of principals, ISA coordinators and teachers engaged in the implementation of Education for Sustainable development in Catholic secondary and lower secondary schools under the control of the Catholic Board of Education, Karachi. The study adds to the international body of research on sustainable education leadership by feeding into it with empirical evidence from Pakistan, and offers recommendations to enhance leadership capacity to facilitate Education for Sustainable Development in school systems.

Problem Statement

There has been progress globally in the inclusion of sustainability in education policy and practice, the successful embedding of ESD still relies heavily on the role of school leaders in developing a shared vision, fostering collaboration, supporting teachers and structuring sustainability into school culture and decision-making processes (UNESCO, 2020; Hallinger, 2020). As a result, leadership has become an important factor identified as essential to sustainable educational transformation. Despite this recognition, the available literature that looks at the connection between leadership and Education for Sustainable Development is still scarce in the context of Pakistan's educational system. Studies have been conducted mainly on sustainability awareness, environmental education, teacher education, and curriculum development, with few studies focusing on the leadership traits required to make ESD initiatives a success in schools. In addition, there is no robust quantitative evidence that relates to the leadership qualities and

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competencies that principals, programme coordinators and teachers who facilitate the implementation of internationally recognised sustainability programmes in schools demonstrate.

The British Council's Connecting Classrooms Programme and the International School Award offer schools a structured programme to include sustainable development, global citizenship and international working in classroom practice. But few empirical evidences are available about the leadership capacity required for the successful implementation of these initiatives in Pakistan especially in the faith based school systems. This study fills this gap by investigating leadership qualities and leadership skills of principals, International School Award coordinators and teachers of Catholic secondary and lower secondary schools of the Catholic Board of Education, Karachi on implementing Education for Sustainable Development.

Research Questions

This study addresses the following research questions:

RQ1. What leadership characteristics are shown by principals, ISA coordinators and teachers who are implementing Education for Sustainable Development?

RQ2. How do principals, ISA coordinators and teachers show leadership in the implementation of Education for Sustainable Development?

RQ3. What are the characteristics of a good leader in implementing ESD in Catholic lower secondary and secondary schools?

2. LITERATURE REVIEW

Education for Sustainable Development

The approach of Education for Sustainable Development (ESD) has become a change-oriented type of education that aims to give learners the knowledge, skills, values, and attitudes that can contribute to solving environmental, social, economic and cultural issues. Since the adoption of the United Nations' 2030 Agenda for Sustainable Development, the importance of education in attaining Sustainable Development Goal (SDG) 4.7 has been reinforced, which calls for teaching and learning competencies

in sustainable development, global citizenship, human rights, peace and cultural diversity (United Nations, 2015). According to UNESCO (2020), *ESD is an education approach that enables people to 'make informed decisions and take responsible actions for the integrity of the environment, economic viability and social justice'.*

ESD has a different perspective from the traditional focus on subjects in that it has a whole-school approach and sustainability is embedded in the curriculum, pedagogy, leadership, governance, resource management and community partnerships (UNESCO, 2020). This is a way to stimulate critical thinking, systems thinking, collaboration, creativity, and problem-solving skills that are required to solve complex sustainability challenges (Rieckmann, 2018). Sterling (2017) states that sustainability is only truly effective when it becomes a way of life throughout schools and not a subject taught as an isolated one.

School Leadership for Education for Sustainable Development

While classroom instruction is considered the most powerful driver of school improvement, school leadership is seen as the next most powerful (Hallinger, 2020). For ESD, leadership isn't just about administrative management; it's also about building a shared vision for sustainability, promoting teamwork, supporting teachers, and establishing sustainable cultures that promote innovation and continuous improvement. Effective leaders create the environment that allows teachers to enhance their teaching and positively engage the school community in sustainability (Leithwood et al., 2020). Therefore, leadership that enables organisational learning, enhance stakeholder engagement and institutional commitment is essential for ESD implementation.

Leadership Traits for Education for Sustainable Development

Leadership trait theory is an explanation of leadership effectiveness that deals with the personal characteristics that affect a leader's ability to motivate and guide others. Modern trait theory acknowledges that leadership is a product of the combination of personal traits and organizational situations, not simply the traits of the leader (Northouse, 2022). states that good leaders possess characteristics including intelligence, self-confidence, determination, integrity, sociability and

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communication (Northouse, 2022).

These are especially relevant for ESD since making sustainability a reality takes leadership that inspires teachers, students, parents and community partners to trust, share a vision, and collaborate. The greater the integrity and communication skills of the leaders, the more likely they are to foster positive school cultures that will promote innovation and organisation change. (Hallinger, 2020). The leadership traits are thus important background to the understanding of how school leaders contribute to the implementation of Education for Sustainable Development. The same perspective also guides in the use of one of the instruments used in the present study, Northouse's (2022) Leadership Traits Questionnaire.

Leadership Skills for Education for Sustainable Development

The Skills Approach is based on skills that are learned through education, training, and work experience, whereas the Leadership traits focus on one's personal traits. Northouse (2022) notes that there are three areas of leadership competencies: technical skills, human skills, and conceptual skills. Technical skills enable them to manage organisational processes and implement educational programmes, human skills involve communication, collaboration and building relationships, while conceptual skills involve analysing organisational problems and formulating strategies to address them.

Hallinger (2020) theorises that developing leadership competencies improves organisational learning and teachers' capacities, which leads to improved school improvement. The Skills Approach is particularly significant for this study as it acknowledges that leadership is a process. As such, Northouse's (2022) Leadership Skills Inventory is used to evaluate the technical, human, and conceptual skills of school leaders who are implementing ESD.

Transformational Distributed Leadership for Education for Sustainable Development (ESD)

Transformational and distributed leadership are considered to be widely accepted models of leadership which can facilitate the implementation of

Education for Sustainable Development. Transformational leadership is about inspiring members of the organisation by means of a shared vision, intellectual stimulation, individual consideration, and motivation (Burns, 1978; Bass & Avolio, 1994). In schools, transformational leaders inspire innovation, support teachers and inspire dedication to improving the school. In the context of sustainability initiatives, Hallinger (2020) identified positive links between transformational leadership and teacher motivation, organisational commitment and the implementation of educational reforms.

Distributed leadership adds to this because it sees leadership as an organisational process and not just the responsibility of one person. Spillane (2006) states that there is a distributed leadership among principals, teachers, coordinators, and other stakeholders, and Harris (2020) proposes that distributed leadership enhances innovation through collaboration and shared decision making. Distributed leadership is an effective way to implement sustainability initiatives given the interdisciplinary nature of ESD and the need for the broader school community to be involved.

The evidence base around ESD that has been consistently found in successful schools includes collaborative leadership, teacher empowerment and stakeholder engagement (Mogren et al., 2019; Hargreaves and Fullan, 2020).

The British Council's Connecting Classrooms Programme and the International School Award

The international school partnership programmes are important tools that support the promotion of Education for Sustainable Development (ESD) and enable global education, intercultural understanding, and collaborative problem-solving. The British Council's Connecting Classrooms Programme (CCP) has been extensively identified as a successful programme that has improved engagement, leadership, teacher professional development and implementation of the Sustainable Development Goals (SDGs) in schools (British Council, 2021). The programme does not only look at international partnerships, but also promotes the integration of sustainability and global citizenship in curriculum planning, teaching and school improvement.

Teachers and students participate in a variety of activities through cooperation with partner-schools, including projects focused on

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environmental sustainability, social inclusion, peace, cultural diversity and responsible citizenship. These experiences develop the skills that are part of the UNESCO framework for ESD, such as critical thinking, cooperation, communication, and active citizenship (UNESCO, 2020). Leaders development is a key strength of the programme. The principals, International School Award (ISA) coordinators and teachers are involved in planning, implementing and monitoring sustainability programs which builds the capacity of leadership across a range of organisational levels.

The International School Award (ISA) builds on the Connecting Classrooms Programme and is for schools that have successfully integrated international perspectives and global citizenship into their teaching, learning and school development. For schools to earn ISA accreditation, they need to show that they have integrated curriculum, engaged in student participation, collaborated with international partners, and committed to the promotion of global learning in their institutions. As such, the award promotes the integration of sustainability into school culture, and not as a one-off project.

There is evidence that international partnership programmes have a positive impact on teacher professional development, curriculum innovation, student involvement and school improvement (British Council, 2021). But maintaining these programs will require strong leadership to facilitate collaborative partnership, inspire teachers, distribute resources, and integrate sustainability into the daily life of the school. The present study hence examined leadership in schools that are involved in the Connecting Classrooms Programme and International School Award to gain insight into the role of leadership traits and skills in the successful implementation of Education for Sustainable Development within schools.

The current literature in Pakistan has mainly investigated the sustainability awareness of university students and pre-service teachers. Kalsoom and Khanam (2017) proved that inquiry-based pedagogies can help to raise awareness about sustainability, as they can help students to critically analyze environmental and social problems. Likewise, Kalsoom et

al. (2017) found that pre-service teachers' sustainability consciousness was at the moderate level, and suggested more attention to sustainability issues in teacher education programmes. The studies underscore the need to develop educators' capacities for sustainable development.

Research on ESD in schools in Pakistan is relatively scarce as compared to higher education. Most of the studies conducted within the school environment have focused on EE, curriculum development or classroom practices; and relatively few on school leadership processes that support sustainable change in education. Furthermore, there have been fewer quantitative studies that examine leadership attributes linked with the successful implementation of ESD. Consequently, little is known of how principals, programme coordinators, and teachers work together to implement and sustain sustainability programs in schools.

Pakistan's Private schools have tended to be more flexible in implementing innovative educational programmes than public schools. A number of schools have been able to embed and embed global citizenship, environmental education and community engagement into school life through involvement in international projects e.g. the British Council's Connecting Classrooms Programme, and the International School Award. Little, however, has focused on the leadership abilities that can support the maintenance of these schools' efforts. The need to discuss leadership of schools actively involved in ESD is apparent, because there are such a large number of schools in the gap.

The literature on Education for Sustainable Development and school leadership is dominated by international research, which consistently points to school leadership as a key element in the successful implementation of ESD, yet there are important gaps in the literature. First of all, most of the empirical evidence comes from Europe and Australia, and other developed countries, therefore understanding of sustainable educational leadership in developing countries like Pakistan is limited. Secondly, most of the studies in Pakistan have been on sustainability awareness, EE and teacher education, while few have investigated the characteristics of leaders that help transform the institution to practice ESD (Kalsoom et al., 2017; Saqib et al., 2020). Third, there has been a lack of quantitative research that has

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explored principals, programme coordinators and teachers' leadership traits and leadership skills when engaging in international sustainability programs.

The present study aims to tackle the shortcomings by using Northouse's (2022) Leadership Theory as its theoretical basis, which combines the Leadership Traits Approach and the Skills Approach. Leadership traits are defined as independent variables that affect the implementation of Education for Sustainable Development, these include communication, determination, integrity, confidence, and sociability of leaders, while leadership skills are defined as a set of independent variables which affect the implementation of Education for Sustainable Development and these include technical skills, human skills, and conceptual skills. This study takes place in Catholic secondary and lower secondary schools involved in the British Council's Connecting Classrooms Programme and/or the International School Award, with principals, ISA coordinators and teachers working together to lead sustainability initiatives.

It is suggested that a conceptual framework can be established that connects leadership attributes and leadership skills to greater collaboration, engagement of teachers, curriculum integration and commitment of actors in the organisations, which in turn will support Education for Sustainable Development to be implemented. This framework was used to develop the research questions, for the selection of the Northouse's Leadership Traits Questionnaire and the Northouse's Leadership Skills Inventory, and for interpretation of the findings of this study. The study offers empirical evidence to the scanty research on sustainable educational leadership in Pakistan by analyzing leadership in schools that are actively implementing ESD and offers some practical suggestions to enhance leadership capacity to achieve sustainable school development.

3. METHODOLOGY

The research design for the study was quantitative case study research to explore the impact of school leadership on the implementation of Education for Sustainable Development (ESD) in catholic Secondary

schools and Lower secondary schools of catholic Board of Education (CBE) Karachi. The case study approach allowed for a detailed look at the leadership characteristics within schools that had taken part in the British Council's Connecting Classrooms Programme and developed ESD initiatives based on the British Council International School Award (ISA) whereas the quantitative approach allowed for the measurement of leadership traits and skills with a standardised research tool. The participants of this study were 18 individuals who had first-hand experience of implementing ESD, including six principals, six ISA coordinators and six teachers from Catholic secondary and lower secondary schools who were selected using purposive sampling. They came from a variety of demographic and professional backgrounds, and had varying gender, age, academic qualifications, leadership experience and engagement in the ISA programme, offering a cross-section of school leadership and ESD implementation.

The LTQ and LSI were two standardised measures designed by Northouse (2022) to collect data. The LTQ evaluated 14 leadership traits and the LSI evaluated leadership competencies in three areas: technical, human, and conceptual skills. The theory-based instruments were chosen due to their proven reliability and validity and the fact that they have been used in leadership research and also aligned with the aim of this study and principles of Education for Sustainable Development (ESD) (Hallinger, 2020; Leithwood et al., 2020; Lussier & Achua, 2022; Northouse, 2022).

4. RESULTS AND DISCUSSION

Leadership Traits Demonstrated by Principals, ISA Coordinators, and Teachers (RQ1)

The first research question aimed to find out what leadership characteristics were exhibited by principals, International School Award (ISA) coordinators and teachers who implemented Education for Sustainable Development (ESD) in Catholic secondary and lower secondary schools. Information about participants' leadership traits was collected through the Northouse Leadership Traits Questionnaire (LTQ) (2022). The data were presented in terms of descriptive statistics such as means and standard deviations to describe the perceptions of the participants about the

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leadership traits.

Table 1: Descriptive statistics for the fourteen leadership traits

		<i>Principals</i>	<i>ISA Coordinators</i>	<i>Teachers</i>	<i>Total</i>
<i>Theme</i>		<i>Mean</i>	<i>ean</i>	<i>ean</i>	<i>ean</i>
	<i>Q</i>				<i>n</i>
<i>Articulate</i>	1				
		4	.4	.33	.64
<i>Perceptive</i>	2	2	17	33	.17
<i>Self-confide</i>	3	3	67	.17	.61
<i>Self-assured</i>	4	2.50	33	.67	83
<i>Persistent</i>	5	2.67	.67	.67	.67
<i>Determined</i>	6	2.83	17	2.67	.89
<i>Trustworthy</i>	7	2.83	83	.17	61
<i>Dependable</i>	8	2.83	00	.17	.67
<i>Friendly</i>	9	2.67	.17	2.17	00

Outgoing	10	2.83	.67	.00	.50
Conscientious	11	2.17	.83	.00	.33
Diligent	12	2.50	.33	.17	.67
Sensitive	13	2.67	.67	.33	.56
Empathetic	14	2.67	.50	.17	.44

The overall results showed that participants' mean scores ranged from moderate to high level on the four-point scale on leadership traits, ranging from 2.17 to 3.64. Among the fourteen leadership traits, articulate communication recorded the highest overall mean ($M = 3.64$, $SD = 1.40$), followed by friendliness ($M = 3.00$, $SD = 1.30$), determination ($M = 2.89$, $SD = 1.20$), self-assurance ($M = 2.83$, $SD = 1.20$), and dependability ($M = 2.67$, $SD = 1.10$). The results indicate that effective communication, interpersonal relationships and leadership commitment are viewed as important leadership attributes for ESD implementation in the participating schools.

Effective communication is regularly cited as one of the key components of good educational leadership as it helps leaders communicate a vision, inspire subordinates, and engage stakeholders in working together (Northouse, 2022). In the Education for Sustainable Development context, the relatively high score for articulate leadership implies that principals, ISA coordinators and teachers identified the need for strong communication of SD goals and the need to coordinate SD activities at the school level. UNESCO (2020) also highlight the importance of leadership to articulate organisational needs and foster shared commitment to sustainable school

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development for the effective implementation of ESD.

The high level of 'friendliness' also reflects the collaborative nature of leadership in schools involved in the British Council's Connecting Classrooms Programme. Leaders who are friendly and approachable are more likely to create a trustful relationship and to foster team working and teacher professional collaboration. Harris (2020) suggests that a collaborative culture is essential for distributed leadership as it fosters an active involvement in decision making and organisation development among staff members. Thus, the present results indicate that interpersonal relationships have an impact on ESD implementation.

Other relatively high leadership traits were determination and dependability. These attributes demonstrate leaders' dedication to meeting the objectives of a programme, even when faced with problems, and their capacity for ongoing support during the programme. Sustainable educational efforts are often a long-term endeavour that involves planning, coordination and ongoing monitoring, and leaders who are persistent and reliable will be more likely to maintain innovation over time (Hargreaves & Fullan, 2020).

While the interpersonal leadership and communication competencies were rated comparatively high, some other leadership competencies had relatively low mean scores. Perceptiveness had the lowest overall mean ($M = 2.17$, $SD = 0.30$), followed by conscientiousness ($M = 2.33$, $SD = 0.70$) and empathy ($M = 2.44$, $SD = 0.90$). These scores are above the middle of the scale and indicate potential areas for leadership development. Educational leaders who implement ESD may be challenged by complex organisational and social issues that demand sensitivity to a range of viewpoints, reflective decision-making and ethical leadership (Leithwood et al., 2020). Further developing these qualities through professional development targeting these characteristics could help school's ability to design and implement sustainability projects effectively.

The comparisons between the different groups of participants revealed some interesting trends. Principals reported more positive scores for

articulation and self-confidence than did ISA coordinators and teachers, most likely due to a formal, higher-level role for principals in the strategic direction and organisational leadership of ISAs. ISA coordinators' mean score was the highest on the friendliness scale ($M = 4.17$) and relatively high scores on determination and diligence indicated that the role of the programme coordinator is very collaborative, enabling communication between the leadership and teaching staff at the school. The teachers showed comparatively lower values for most of the leadership traits, especially for the outgoing behaviour and conscientiousness, but their answers were mostly positive. The results are consistent with distributed leadership, where various stakeholders in a school's community bring the range of leadership attributes needed for the successful operation of the school, based on their professional roles (Spillane, 2006; Harris, 2020).

The results showed that the leadership of ESD in the schools that participated is mainly characterised by collaboration, communication, determination, and commitment to the organisation. The characteristics of leadership are closely aligned with those laid out by UNESCO (2020) in their whole-school approach to sustainability, which focuses on shared vision, collaboration, and engaging all stakeholders in the organisation's culture. The findings also align with Northouse's (2022) Trait Approach, indicating that personal leadership traits play a role in sustaining successful coordination of the sustainability initiatives in educational institutions.

Principals, ISA Coordinators, and Teachers shown leadership skills (RQ2)

The second research question aimed to explore the leadership skills of principals, International School Award (ISA) coordinators and teachers in the process of implementing Education for Sustainable Development (ESD). The leadership skills were measured through the Northouse's Leadership Skills Inventory that measures abilities of effective leadership. Participants' responses were described using descriptive statistics (means and standard deviations).

Table 2: Descriptive Statistics are provided for the Leadership Skills Inventory

Principals		ISA Coordinators		Teachers		Total	
ean	D	ean	D	ean	D	ean	D

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1	.25	.50	.40	.00	.89	.75	.00	.50	.77	3.00	.73
2	.00	.00	.40	.00	.52	.75	.00	.96	.69	3.00	.03
3	.25	.50	.40	.00	.89	.00	.00	.82	.23	3.00	.73
4	.25	.50	.80	.00	.10	.50	.00	.58	.85	3.00	.80
5	.50	.58	.60	.00	.14	.50	.00	.58	.85	3.00	.90
6	.25	.96	.60	.00	.14	.75	.00	.50	.85	3.00	.90
7	.00	.82	.20	.00	.84	.00	.00	.00	.08	3.00	.64
8	.25	.50	.00	.00	.71	.75	.00	.50	.00	3.00	.58
9	.25	.50	.20	.00	.84	.75	.00	.50	.08	3.00	.64
10	.50	.58	.00	.00	.71	.00	.00	.41	.15	3.00	.90
11	.25	.50	.20	.00	.84	.25	.00	.96	.23	3.00	.73
12	.00	.82	.80	.00	.45	.75	.00	.50	.85	3.00	.56
13	.25	.50	.80	.00	.45	.75	.00	.50	.92	3.00	.49
14	.25	.50	.60	.00	.55	.75	.00	.26	.85	3.00	.80
15	.25	.50	.80	.00	.45	.25	.00	.50	.08	3.00	.49
16	.75	.96	.60	.00	.55	.75	.00	.50	.69	3.00	.63
17	.75	.50	.80	.00	.30	.50	.00	.58	.69	3.00	.86
18	.25	.50	.80	.00	.30	.00	.00	.82	.00	3.00	.91

From the descriptive analysis, it can be seen that participants' mean scores in the leadership skills dimension were all at a very high level, ranging from 3.69 to 4.23 out of 5 points. The results of this study indicate that the participants had a good profile of leadership competencies that help them to plan, implement and manage Education for Sustainable Development initiatives in their own schools.

Among the eighteen leadership skill items, the highest overall mean score was recorded for S3 ($M = 4.23$, $SD = 0.73$) and S11 ($M = 4.23$, $SD = 0.73$), followed by S10 ($M = 4.15$, $SD = 0.90$) and S7, S9, and S15 (each $M = 4.08$). The relatively high scores suggest that participants felt confident in developing strong leadership skills in the areas of managing educational activity, working in partnership with colleagues and organisational responsibilities related to the implementation of ESD. These are the skills needed to facilitate school-led sustainability efforts that demand interagency cooperation between school leaders, teachers, students, and the community.

Northouse (2022) suggests that effective leadership depends on not only possessing certain personal qualities, but also mastering certain skills

acquired through education, professional training and hands-on experience. The high level of leadership skills scores reported in this research are indicative of the Skills Approach to Leadership, which indicates that participants acquired the skills to lead educational projects in their schools. The results are important since Education for Sustainable Development necessitates the skills of its leaders to handle interdisciplinary projects, to work in a team, to communicate, and to adapt to new educational issues.

The results of the comparison between the groups indicated that principals consistently had the highest scores for leadership skills over most of the inventory items. Principals' mean scores were 4.50 (S5) and 4.25 (on several other items), demonstrating a high level of confidence in their leadership. This is in line with principal responsibilities to ensuring strategic direction, coordinating school improvement efforts, resource allocation and providing conditions for teaching and learning in the school. Hallinger (2020) also maintains that principals are in the middle of creating school culture, supporting instructional improvement, and moving school towards change through effective leadership.

Furthermore, there were high levels of leadership competencies for the ISA coordinators with a few items having mean scores greater than 4.00 such as S3 ($M = 4.40$), S7 ($M = 4.20$), S9 ($M = 4.20$), and S11 ($M = 4.20$). The results underscore the significance of ISA coordinators in handling international collaboration projects, communication among the stakeholders and supporting the progress of Education for Sustainable Development. Their consistent positive ratings indicate that the role of the ISA coordinators is crucial in supporting the successful delivery of the British Council's Connecting Classrooms Programme and is an important link between school leadership and classroom teachers.

Teachers also reported positive perceptions of their leadership skills with mean scores being generally between 3.50 and 4.25. The highest teacher ratings were found for S11 and S15 ($M = 4.25$) and for a few other items the mean ratings were 4.00 (S3, S7, S10, and S18). The results indicate that teachers see themselves as active participants in their school's leadership development and not just receivers of leadership from administration. This kind of outcomes can be related to the idea of

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distributed leadership whereby leadership responsibilities are shared among members of the school community based on their expertise and professional roles (Harris, 2020; Spillane, 2006).

The variations in leadership skill scores between principals, ISA coordinators and teachers are also relative small, a further indicator that leadership for Education for Sustainable Development is not restricted to formal leadership roles. Rather, there seems to be distributed leadership in each of the multiple professional roles, which suggests the collaborative nature of sustainability initiatives within the participating schools. UNESCO (2020) promotes a whole school way of working on Education for Sustainable Development, in which the principal, teachers, students, and community members all play a role in contributing to sustainable learning environments. The current results are empirical evidence to support this view, showing that leadership capabilities are present across various categories of education professionals.

While overall the findings were very positive, the lowest mean scores were found in S2 and S16 (both $M = 3.69$), with S17 ($M = 3.69$) coming in next. These scores are above the middle of the scale, but indicate needs for additional professional development to support certain leadership skills. Ongoing leadership development initiatives can be expanded to incorporate strategic planning, collaborative problem-solving, and change management to further enrich educators' ability to effectively carry out sustainable educational practices.

Based on these results, it may be concluded overall that principals, ISA coordinators and teachers in Catholic secondary and lower secondary schools have good leadership abilities to enable the implementation of ESD. All participant scores were high and indicate that Northouse's (2022) Skills Approach to leadership development, which states that leadership skills can be acquired through learning and experience is supported. Moreover, the results are consistent with previous educational leadership studies which showed that good leadership ability is linked to the improvement of organisations, teachers' collaboration, and the successful implementation of

educational innovation (Hallinger, 2020; Leithwood et al., 2020). These leadership capabilities seem to have helped to build partnerships, to embed ESD into the curriculum, and to keep the process of ESD going, contributing to the overall aims of sustainable school development in the context of the British Council's Connecting Classrooms Programme.

The focus of this study was to explore the leadership traits and skills of principals, International School Award (ISA) coordinators and teachers who are working with the Catholic Board of Education (CBE) in the implementation of Education for Sustainable Development (ESD) in Catholic secondary and lower secondary schools in Karachi. The results showed that the participants had a positive attitude about leadership and they had good leadership skills, especially communication, collaboration, determination and interpersonal skills. This research confirms the findings of many previous studies that have connected successful Education for Sustainable Development (ESD) with effective school leadership (UNESCO, 2020; Hallinger, 2020).

The results indicated articulate communication as the top leadership skill of all its respondents. This indicates that leaders who are taking ESD on board are aware of the need for conveying a clear vision, organising school activities and involving stakeholders. It is clear that communication is important and has been identified as a core trait of an educational leader as it has a significant role in developing shared understanding, clarifying organisational objectives and supporting co-operation between teachers and other stakeholders (Northouse, 2022). Communication is even more important within ESD as the sustainability movement demands the incorporation of environmental, social and global citizenship issues into a wide range of subjects and school activities. UNESCO (2020) also states that leaders who can effectively convey sustainability goals and inspire all people involved in the school community to embrace them are essential for the successful implementation of ESD.

One of the other key results is the relatively high level of friendliness, determination and dependability. The characteristics of leadership that participants saw as being more than administrative duties have been used to suggest that they viewed leadership as a collaborative and relationship-

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based process. The process of educational change for sustainability takes time, trust, and collaboration from the school leader, teachers, students and community. Hargreaves and Fullan (2020) believe that sustainable educational improvement relies on building relationships and capacity of organisations not solely on individual leadership. The results therefore reinforce the idea of sustainable leadership as the interpersonal relationship and commitment are demonstrated as important qualities of leaders practicing EDSD.

Comparatively low ratings for perceptiveness, conscientiousness and empathy do not necessarily reflect a weakness, but rather an opportunity for further professional development. Learning for Sustainable Development often requires responding to complex social, cultural and environmental challenges that involve reflective decision-making, ethical leadership and awareness of differences. Through explicit and specific leadership development programmes, these leadership skills could be developed to enhance the capacity of schools to deal with new sustainability issues. Leithwood et al. (2020) state the same thing – effective school leaders are constantly developing their interpersonal and reflective skills as a reaction to the changing context of education.

The results also showed very high leadership abilities within the principals, coordinators of ISA and the teachers. This lends weight to Northouse's (2022) Skills Approach that suggests that leadership effectiveness is a function of personal characteristics as well as skills that can be learned and developed through education, training, and experience. The high scores on the leadership skills in this study indicate that the participants have the human, conceptual and technical competencies to coordinate educational programmes, manage organisational change and support collaborative learning. The findings are significant as ESD demands leaders to be inter-disciplinary, partner oriented and to deal with complex educational issues.

The principals reported the highest levels of leadership competencies, but teachers and ISA coordinators showed high levels of leadership

competencies as well. This discovery reinforces the concept of distributed leadership, which acknowledges leadership as a collaborative organisational practice, and not the prerogative of school principals (Spillane, 2006; Harris, 2020). The work of the ISA coordinators in the British Council's Connecting Classrooms Programme is a good example of this, as coordinators often serve as a link between the leadership of the school and the classroom teacher and are responsible for sustaining projects and developing international partnerships. Similarly, teachers actively contribute to the development of the activities in the classroom, to the involvement of the students, and to the incorporation of sustainability in the teaching process. The differences in leadership skill scores among the three groups of participants are not very large, indicating that in this context leadership in ESD is shared and spread throughout the school community.

These findings are also aligned with UNESCO's (2020) whole-school approach to Education for Sustainable Development which calls for the integration of sustainability into classroom teaching and school governance, leadership, community engagement and institutional culture. Instead of principals alone, the participating schools seem to have created collective leadership teams with principals, ISA coordinators and teachers all having a role in the implementation of sustainability initiatives. A key part of such activity should be developing the ability to work collaboratively, to reach decisions together and to learn together, which are especially crucial for schools that are involved in the British Council's Connecting Classrooms Programme, where collaboration is essential for success in this programme.

The results also indicate that involvement in the Connecting Classrooms Programme might have helped to build the leadership capacity of schools involved in the programme. Educators have been able to build leadership skills through engagement in international partnerships, collaboration and professional learning, which have enabled them to support curriculum innovation and global citizenship education. The present study did not specifically look at the effectiveness of the programme per se, but the constant positive leadership characteristics observed among the participants in the study suggest that participation in international educational programmes could be beneficial in the development of

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leadership practices that are compatible with ESD. The British Council (2021) found that involvement in international school partnerships has positive impacts on collaboration, teacher professional learning and institutional development.

The results have ramifications for educational policy and school leader development. Professional learning programs must go beyond administration and focus more on communication and collaboration skills, strategic leadership, and sustainability skills. School leadership organisations, such as the Catholic Board of Education and other school leadership organisations, should promote distributed leadership by offering leadership opportunities for teachers and programme coordinators as well as school principals. Improving collaborative leadership arrangements can improve schools' ability to formalize ESD and go beyond the scope of externally funded programmes.

The results overall confirm that the implementation of Education for Sustainable Development is not only reliant on the existence of formal leaders but also capacity building of leaders within the school community. Organisation conditions that enable sustainable educational practices are enabled by effective communication, collaborative relationships, determination and well-developed leadership skills. These results confirm the Leadership Theory of Northouse (2022) and follow the international evidence that collaborative and distributed leadership are one promising way to establish ESD in school systems. This study helps build the body of empirical evidence from Catholic secondary schools in Karachi, and provides specific insights for building leadership capacity to support Sustainable Development Goals within an education sector.

6. CONCLUSION

The present study focused on the leadership characteristics and leadership skills of principals, ISA coordinators and teachers who are implementing Education for Sustainable Development (ESD) in Catholic secondary and lower secondary schools under the supervision of the Catholic Board of Education, Karachi. The results indicated positive

characteristics of leadership, most notably in communication, collaboration, determination, and interpersonal relations, along with consistently high levels of leadership skills. The findings agree with the Leadership Traits and Skills Approaches of Northouse (2022) and also align to the whole school approach of UNESCO (2020) which emphasizes on collaborative leadership in the implementation of ESD. The study was limited to Catholic schools in Karachi and descriptive in nature, but it also adds to the very limited body of literature available on the concept of sustainable education leadership in Pakistan, and offers some practical implications for leadership development and the further movement of ESD in the country.

7. RECOMMENDATIONS

The findings of this study suggest that education authorities need to offer ongoing training and development for principals, ISA coordinators and teachers to build leadership skills that include communication, collaboration, strategic leadership and implementing Education for Sustainable Development (ESD) (Northouse, 2022; UNESCO, 2020). It is also important that school promote distributed leadership and actively engage ISA coordinators and teachers in the development, planning and monitoring of the school's sustainability efforts so as to create a whole school approach to ESD (Harris, 2020; Leithwood et al., 2020). Furthermore, larger samples of schools and more diverse samples within school sectors are needed across the country, as well as the use of mixed methods or sophisticated quantitative methods to gain a deeper understanding of leadership in supporting effective implementation of ESD (Creswell & Creswell, 2023).



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