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Perceived Influence of Management of Early Child Education for Sustainable Development of Public secondary schools in Port Harcourt

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Abstract

This paper examines Perceived influence of Management of Early Childhood Education for Sustainable Development of Public Secondary Schools in Port Harcourt. Three objective, three research questions and three hypotheses were posed to guide the study. The population for the study consisted of 2,238 (Two Thousand Two Hundred and Thirty-Eight) for teachers and students in 17 Public secondary schools in Port Harcourt. The sample size consists of 339 using Taro Yamen formular. Data for the study were collected by means of questionnaire titled early child education for Sustainable Development questionnaire (ECESDQ)'. The instrument adopted a four-point rating scale of High Extent to Very low Extent. Cronbach Alpha method was used for the reliability test which yielded reliability co-efficient of 0.92. 339 Copies of questionnaire were distributed, and Three hundred and twelve (312) were retrieved for analysis. Mean and Standard Deviation were used to answer the research questions, while z-test was used to test the hypotheses. The findings revealed that curriculum content address the diverse needs and backgrounds of students in early childhood education settings. Teacher training programmes in early childhood education improve teachers' skills in creating engaging and age-appropriate learning environments. Based on the findings, conclusion draw that Competent teachers, equipped with the necessary training and resources, are pivotal in fostering students' understanding and commitment to sustainability goals. Furthermore, a well-structured curriculum that integrates sustainability concepts across subjects and aligns with global goals ensures that students are prepared for the complexities of a sustainable future. It recommends that School management should ensure access to modern teaching resources, including digital tools and interactive materials, that support innovative pedagogical methods. Resources such as online learning platforms, sustainability-focused textbooks, and outdoor learning spaces can enhance students' understanding of sustainability issues.

Keywords: Curriculum content, Pedagogical approaches and Teacher's competency

Introduction

Early Childhood Education (ECE) plays a crucial role in laying the foundation for lifelong learning and sustainable development. It encompasses various educational strategies and practices aimed at young children, typically from birth to eight years old. Early childhood education for sustainable development focuses on integrating principles of sustainability into early education to foster a generation that is aware of and committed to environmental, social, and economic sustainability. This approach not only enhances children's cognitive and social skills but also promotes a mindset that values and strives for a sustainable future (UNESCO, 2020).

The management of early childhood education significantly impacts sustainable development in secondary schools by laying a strong foundation for lifelong learning and responsible citizenship. Effective management practices that integrate values like inclusivity, equity, and environmental consciousness foster critical thinking and social responsibility among young learners. Early childhood education (ECE) also promotes essential skills such as collaboration, adaptability, and cultural awareness, which are critical for addressing global challenges. UNESCO emphasizes that well-managed ECE programs enhance children's cognitive and emotional development, preparing them to engage constructively in diverse social and economic systems, ultimately contributing to sustainable societies, United Nations Sustainable Development Group. (2023).

Moreover, linking early education to sustainable development requires integrating community-based approaches and fostering partnerships between stakeholders, including governments, educators, and families. This ensures that educational practices are locally relevant while addressing global goals, such as the United Nations' Sustainable Development Goals (SDGs). Studies have highlighted that children who receive quality early education are more likely to succeed in secondary school and beyond, reducing inequalities and enabling broader societal progress. By focusing on sustainability principles in ECE management, schools create a ripple effect that strengthens secondary education and fosters long-term developmental benefits, UNESCO. (2023).

Early childhood education is any group of programme designed to promote children's intellectual social, emotional, language, physical development and learning from birth to the age of eight (Olowe, Kutelu, and Majebi,2020; Sooter, 2019). Education starts at birth. Since the United Nations (UN) has pointed out ECE (pre-primary education) as a quality aspect of lifelong learning in education globally, teachers should take Education for Sustainable Development (ESD) seriously and develop it to become part of all children's life. Early childhood education should be among the most important elements in young children's education (Richter et al., 2017). The first years of life are the most critical, as the foundation of values, attitudes and personality will guide feelings, behaviour, and thoughts for the rest of their life. Early childhood education and secondary education cater to different developmental stages, the underlying principles of curriculum content, teaching methods, teacher training and professional development are essential at both levels. Adapting these Early childhood education strategies to secondary education can enhance the learning experience by making it more

student-centered, holistic, and developmentally appropriate for adolescents. This approach can help secondary students engage more deeply with their education and develop the skills they need for future success. The curriculum in secondary education should be relevant to the students' interests, cultural backgrounds, and future aspirations. It should encompass a broad range of subjects while also allowing for specialization in areas like science, technology, engineering, arts, and mathematics (STEAM). Teaching methods in secondary schools are pivotal in promoting sustainable development by shaping how students learn, engage, and apply knowledge about sustainability, Rieckmann (2022). Active and participatory teaching methods, such as project-based learning, experiential learning, and collaborative problem-solving, are particularly effective in this regard. These methods encourage students to explore real-world sustainability issues, work together to develop solutions, and reflect on their learning experiences. Teachers in secondary education, like those in early childhood education, benefit from ongoing professional development to keep up with new teaching strategies, technological tools, and subject knowledge. Teacher training and professional development are essential for enhancing sustainable development in secondary schools, as they equip teachers with the knowledge, skills, and pedagogical approaches necessary to teach sustainability effectively, Vare & Scott. (2020).

Sustainable Development is another concept that needs explanation. It is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations General Assembly, 1987:43). Sustainable development could otherwise be called" equitable and balanced", meaning that in order for development to continue indefinitely, it should balance the interest of different groups of people, within the same generations, and do so simultaneously in three major interrelated areas-economic, social and environmental.

Curriculum Content

Curriculum content in secondary schools plays a crucial role in promoting sustainable development by integrating knowledge and practices that foster environmental stewardship, social equity, and economic responsibility, UNESCO. (2020). A well-designed curriculum can empower students to understand and address global challenges such as climate change, resource depletion, and social inequality. Incorporating sustainable development into the curriculum also involves teaching critical thinking, problem-solving, and collaborative skills. These

competencies enable students to analyze complex issues and develop innovative solutions that balance economic, social, and environmental considerations.

Pedagogical Approaches

Pedagogical approaches refer to the strategies and methodologies educators employ to facilitate learning and ensure students grasp knowledge effectively. These approaches are shaped by the goals of education, the needs of students, and the subject matter. Common pedagogical methods include **direct instruction,** where teachers explicitly deliver content, and **inquiry-based learning**, which encourages students to explore, ask questions, and solve problems. Other approaches such as **collaborative learning** emphasize teamwork and peer interaction, fostering a sense of community and improving social-emotional skills. These methods aim to engage students actively, enhancing both critical thinking and motivation (Teacher Strategies, 2024)

Pedagogical approaches in early childhood education (ECE) emphasize creating learning environments that nurture children's cognitive, social, and emotional development. Vygotsky's **sociocultural theory** highlights the importance of social interaction and scaffolding, suggesting that children learn best when supported by educators and peers within their zone of proximal development (Vygotsky, 1978). This view is complemented by Dewey's focus on experiential learning, which emphasizes hands-on activities and encourages children to learn through interaction with their environment (Dewey, 1938). These theories underline the value of active, play-based learning where children explore, ask questions, and construct knowledge in meaningful ways.

Other educators advocate for **Montessori's child-centered approach**, which emphasizes autonomy, sensory learning, and individualized instruction tailored to each child's developmental stage (Montessori, 1964). Similarly, Reggio Emilia's philosophy stresses collaboration, creative expression, and project-based learning, viewing children as capable individuals who co-construct knowledge with peers and educators (Malaguzzi, 1996). Contemporary practices also integrate **inclusive and multicultural pedagogies**, ensuring that ECE programs address diverse cultural and developmental needs to foster equity and sustainability in education (UNESCO, 2023).

Teacher competency

Teacher competency in early childhood education encompasses the knowledge, skills, and dispositions necessary for teachers to effectively support the developmental needs of young

children. These competencies include creating inclusive environments, fostering social-emotional development, and applying culturally responsive teaching practices. According to Han and Kemple (2006), teachers' ability to cultivate a positive social climate enhances children's learning by fostering inclusivity and respect. This includes creating diverse group activities that promote teamwork and recognizing cultural differences to build tolerance and respect. These strategies support not only academic readiness but also social and emotional growth, helping children develop confidence and a sense of belonging. The importance of reflective practices among educators. For example, teacher preparation programs encourage candidates to reflect on how their upbringing influences interactions with children and families. This reflection aids in tailoring instruction for diverse learners, including those with disabilities or dual-language needs. Effective teacher training programs focus on aligning values with practices, preparing educators to handle varied cultural and social dynamics in early childhood settings

Statement of Problems

Early childhood education (ECE) plays a crucial role in laying the foundation for sustainable development. The influence of early childhood education on sustainable development has become a critical concern, particularly regarding on curriculum content, pedagogical approaches, and teacher competency—impact its effectiveness. Despite global efforts to integrate sustainability into education, many early childhood programs in public schools fail to provide comprehensive and relevant curriculum content that prepares young learners to address future environmental, social, and economic challenges. Curricula often lack a holistic approach to sustainability, limiting children’s ability to develop critical thinking and problem-solving skills needed for fostering sustainable practices (UNESCO, 2021).

The pedagogical approaches employed in early childhood education frequently fall short of fostering engagement with sustainability concepts. Many educators rely on traditional methods that do not adequately encourage experiential learning or critical inquiry, which are vital for instilling sustainable values. Research has shown that innovative teaching strategies, such as project-based and culturally responsive learning, can significantly enhance students' understanding of sustainability (Blumenfeld et al., 1991; Gay, 2002). However, the implementation of such methods is often constrained by limited resources and inadequate training.

Teacher competency is another significant challenge. In many cases, educators lack the professional training and ongoing development needed to effectively integrate sustainability concepts into their teaching practices. Teachers' limited knowledge of education for sustainable development (ESD) diminishes their ability to inspire and prepare students to become active participants in sustainable initiatives. This gap highlights the urgent need for targeted investments in teacher training programs and professional development opportunities to enhance their skills in delivering sustainability-focused education (Darling-Hammond et al., 2020).

Purpose of the Study

The main aim of this study is to determine Perceived influence of Management of Early Childhood Education for Sustainable Development of Public Secondary Schools in Port Harcourt. Specifically, the study seeks to:

1. Determine the extent to which Curriculum content design influence Sustainable Development of Public secondary schools in Port Harcourt.
2. Determine the extent to which pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt.
3. Determine the extent teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt.

Research Questions

The following research questions are posed to guide the study:

1. To what extent does Curriculum content design influence Sustainable Development of Public secondary schools in Port Harcourt?
2. To what extent does pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt?
3. To what extent does teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt?

Hypotheses

The following hypotheses are formulated and were tested at 0.05 level of significance:

1. There is no significant difference between teachers and students in their mean rating on the extent to which Curriculum content design influence Sustainable Development of Public secondary schools in Port Harcourt.

2. There is no significant difference between teachers and students in their mean rating on the extent to which pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt.
3. There is no significant difference between teachers and students in their mean rating on the extent to which teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt.

Methodology

Descriptive survey research design was adopted for this study. The design was adopted because the study involves drawing generalization based on analysis of data that would be collected from a fraction of a large population. The area covered by this study is Rivers State. This study focuses its attention on public secondary schools, in Port Harcourt LGA. The population of the study consisted of 2,238 (Two Thousand Two Hundred and Thirty-eight) teachers and students in 17 Public secondary schools in Port Harcourt. 2,204 students and 34 teachers respectively. The sample size consisted of 339 using Taro Yamen formular, out of the total population of 2,238. The simple random sampling technique was used for the study hence; all the respondents were given equal chance and opportunity. The instrument used for data collection is a self – structured questionnaire developed by the researcher titled "Early child education for sustainable development (ECESDQ). The option scale that is used for the instrument is 4-point rating scale of Very High Extent (VHE – 4points), High Extent (HE – 3points), Moderate Extent (ME – 2points), and Low Extent (LE- 1point). The research instrument was face and content validated by three (3) experts in the field of Education. Two experts from Educational Management including one Measurement and Evaluation expert. In order to establish the reliability of the instrument, Cronbach Alpha method was used. A reliability coefficient of 0.84 was obtained, which the researcher felt it was high enough and that the instrument was therefore, deemed reliable. Three Hundred and thirty-nine (339) copies of questionnaire was administered to the respondents by the researcher and two (2) trained research assistants, three hundred and twelve (312) was retrieved for the analysis. The data gathered were analyzed using mean and standard deviation to answer the research questions. z-test was used to test the hypotheses at 0.05 level of significance

Result

Research Question 1: To what extent does Curriculum content design influence Sustainable Development of Public secondary schools in Port Harcourt?

Table 4.1: Mean and Standard Deviation on the extent to which Curriculum content design influence Sustainable Development of Public secondary schools in Port Harcourt (N = 312)

		Teacher = 34			Student = 278		
S/N	**Item Statements**	$\bar{x}$	**SD**	**Remarks**	$\bar{x}$	**SD**	**Remarks**
1	curriculum content in early childhood education cover key developmental areas, such as cognitive, social, and emotional growth	3.59	0.73	Very High Extent	3.33	0.89	High extent
2	early childhood education curriculum incorporates age-appropriate activities and materials that engage young learners	3.44	0.77	High Extent	3.19	0.93	High Extent
3	curriculum content addresses the diverse needs and backgrounds of students in early childhood education settings	3.59	0.84	Very High Extent	3.23	1.05	High extent
4	early childhood education curriculum integrates foundational skills such as literacy and numeracy in a way that is suitable for young children	3.44	0.74	High extent	3.66	0.61	Very High Extent
5	curriculum content promotes the development of critical thinking and problem-solving skills in early childhood education	3.47	0.78	High Extent	3.64	0.59	Very High Extent
	Grand Mean =	**3.50**	**0.77**	Very High Extent	**3.41**	**0.81**	Very High extent

The results in table 1 show that all the items on the table were rated to be very high extent by the Teachers and Students. It is generally concluded that curriculum content in early childhood education cover key developmental areas, such as cognitive, social, and emotional growth to be Very high extent. The confirmation was made with a grand mean of 3.50 and standard deviation of 0.77 for teachers while that of students were 3.41 and 0.81 for mean and standard deviation.

Research Question 2: To what extent does pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt?

Table 4.2: Mean and Standard Deviation on the extent to which pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt (N = 312)

		Teacher = 34			Student = 278		

S/N	Item Statements	$\bar{x}$	SD	Remarks	$\bar{x}$	SD	Remarks
1	extent incorporate play-based learning to foster creativity and critical thinking among students for sustainable development	3.62	0.73	Very High extent	3.18	1.04	Very High extent
2	extent project-based learning in your classroom enhance students' ability to solve real-world sustainability challenges	3.32	0.87	Very High extent	3.47	0.79	Very High extent
3	extent experiential learning activities (e.g., hands-on projects or fieldwork) helpful in understanding sustainability concepts	3.50	0.78	Very High extent	2.97	1.12	High extent
4	teachers' instructional methods encourage critical thinking about environmental, social, and economic sustainability issues	3.62	0.59	Very High extent	3.46	0.70	Very High extent
5	school curriculum integrates pedagogical approaches that connect classroom learning to global sustainable development goals	3.32	0.87	Very High extent	3.66	0.62	Very High extent
	Grand Mean & SD =	**3.48**	**0.76**		**3.34**	**0.85**	

The results in Table 2 show that one of the items on the table were rated to a Very high extent (that is, item 1,2,4, and 5) while 3 of the items were rated to a high extent (that is, item 3). It is therefore concluded that teachers' instructional methods encourage critical thinking about environmental, social, and economic sustainability issues. School curriculum integrate pedagogical approaches that connect classroom learning to global sustainable development goals. The confirmation was made with a grand mean of 3.48 and 0.76 while standard deviation of 3.34 and 0.85 for both Teacher and students.

Research Question 3: To what extent does teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt?

Table 4.3: Mean and Standard Deviation on the extent to which teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt (N = 312).

		Teacher = 34			Student = 278		
S/N	Item Statements	$\bar{x}$	SD	Remarks	$\bar{x}$	SD	Remarks
1	integrate sustainable development concepts into your lesson plans promote environmental awareness	3.38	0.87	Very High extent	3.22	0.86	Very High extent

2	professional training prepares you to teach sustainable practices effectively in the classroom	3.09	1.04	Very High extent	3.38	0.94	Very High extent
3	teachers encourage discussions and critical thinking about sustainability challenges and solutions	3.74	0.66	Very High extent	3.37	0.87	Very High extent
4	teachers' ability to use real-world examples improve your understanding of sustainability practices	3.26	0.95	Very High extent	2.59	0.98	High Extent
5	teachers' communication and interpersonal skills inspire you to actively engage in sustainable development activities	3.65	0.64	Very High extent	3.55	0.70	Very High extent
	Grand Mean =	**3.42**	**0.83**		**3.22**	**0.87**	

The result in table 3 shows that item 1,2,3 and 5 on the table were rated to a Very High extent while only item 4 was rated to a high extent. The grand mean of 3.42 and 3.22 brings the conclusion that teachers' communication and interpersonal skills inspire you to actively engage in sustainable development activities. Integrate sustainable development concepts into your lesson plans promote environmental awareness to a High extent

Test of Hypotheses

Hypothesis 1: There is no significant difference between teachers and students in their mean rating on the extent to which Curriculum content design influence Sustainable Development of Public secondary schools in Port Harcourt.

Table 4.5: z-test Analysis on the mean response of teachers and students in their mean rating on the extent to which Curriculum content design influence Sustainable Development of Public secondary schools in Port Harcourt.

Respondents	**N**	$\bar{x}$	**SD**	**Std Error**	**df**	**A**	**z-cal**	**z-crit**	**Decision**
Teacher	34	3.50	0.77	0.019	310	0.05	0.69	1.96	Ho failed to reject
Students	278	3.41	0.81						

Table 5, the z–calculated value of 0.69 is less than z–critical value of 1.96 at 0.05 levels of significance and 310 degree of freedom. The null hypothesis is accepted. Indicating there is no significant difference in the mean responses of teachers and students in their mean rating on the extent to which Curriculum content improve sustainable development**.**

Hypothesis 2: There is no significant difference between teachers and students in their mean rating on the extent to which pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt.

Table 4.6: z-test Analysis on the mean responses of teachers and students in their mean rating on the extent to which pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt.

Respondents	N	$\bar{x}$	SD	Std Error	df	A	z-cal	z-crit	Decision
Teacher	34	3.48	0.76	0.019	310	0.05	1.07	1.96	Ho failed to reject
Students	278	3.34	0.85						

From the z – test in Table 6, the calculated value is 1.07 while the z – critical value is 1.96 at 0.05 level of significance. The z – calculated value is lower than z– critical value, the null hypothesis is therefore accepted. Indicating there is no significant difference in the mean responses of teachers and students in their mean rating on the extent to which pedagogical approaches influence Sustainable Development of Public secondary schools in Port Harcourt.

Hypothesis 3: There is no significant difference between teachers and students in their mean rating on the extent to which teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt.

Table 4.7: z-test Analysis on the mean responses of teachers and students in their mean rating on the extent to which teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt.

Respondents	N	$\bar{x}$	SD	Std. Error	df	A	z-cal	z-crit	Decision
Teacher	34	3.42	0.83	0.022	310	0.05	1.42	1.96	Ho failed to reject
Students	278	3.22	0.87						

Table 9, the z–calculated value of 1.42 is less than z–critical value of 1.96 at 0.05 levels of significance and 310 degrees of freedom. The null hypothesis is accepted. Indicating there is no significant difference in the mean responses of teachers and students in their mean rating on the extent to which teacher's competency influence Sustainable Development of Public secondary schools in Port Harcourt.

Discussion of Findings

The Discussion of findings were done according to each research question posed in chapter one as thus:

The findings from all the items in the questionnaire in general, and the summary of the findings in particular are discussed in this section. The discussion is presented according to the three research questions posed. Findings of the study in Research Question 1 which was analyzed and presented in Table 1, curriculum content in early childhood education cover key developmental areas, such as cognitive, social, and emotional growth to a be Very high extent. This finding concurs with the assertion Adekomi (2017) opines that **Curriculum content** is the subjects, topics, and materials that students are taught, which must be carefully designed to meet the developmental needs and learning objectives of the students.

Findings of the study in Research Question 2 which was analyzed and presented in Table 2, teachers' instructional methods encourage critical thinking about environmental, social, and economic sustainability issues. School curriculum integrate pedagogical approaches that connect classroom learning to global sustainable development goals to a be Very high extent. This finding concurs with the assertion Darling-Hammond et al., (2020), Pedagogical approaches play a pivotal role in improving sustainable development in public secondary schools, as they shape students' understanding and engagement with sustainability concepts. Project-based learning (PBL), for instance, encourages students to tackle real-world challenges related to environmental, social, and economic sustainability. In line with the view of Blumenfeld et al. (2019), Project-based learning fosters critical thinking, collaboration, and problem-solving skills, equipping students with the ability to address sustainability issues practically. (Kolb, 2004) stated that experiential learning, which emphasizes hands-on activities and fieldwork, has been shown to deepen students' appreciation of sustainable practices by connecting theoretical knowledge with real-life applications.

Gay (2002) asserts that this method allows educators to address diverse cultural backgrounds, fostering a sense of belonging and respect among students. By incorporating local and global perspectives on sustainability, this approach helps students understand the interconnectedness of societal and environmental challenges. Additionally, the integration of digital technologies in teaching enhances access to global knowledge on sustainability, aligning with the findings of Sharma and Monteiro (2021), who emphasize the importance of technology in modern pedagogical practices to advance education for sustainable development.

Findings of the study in Research Question 3 which was analyzed and presented in Table3, teachers' communication and interpersonal skills inspire you to actively engage in sustainable

development activities. Integrate sustainable development concepts into your lesson plans promote environmental awareness to a be Very high extent. This finding concurs with the assertion Darling-Hammond et al., (2020) Teachers' competency is critical in enhancing sustainable development in public secondary schools, as their skills and knowledge directly influence students' understanding of sustainability concepts. Teachers who demonstrate high competence in integrating sustainability into their pedagogy help foster students' critical thinking, environmental awareness, and social responsibility. In view of Shulman (1987), effective teaching requires a deep understanding of subject content, pedagogical strategies, and the ability to make the material relevant to real-world contexts. This multidimensional competency empowers teachers to instill sustainable values and practices in students, ensuring they are prepared to address complex global challenges.

As highlighted by Darling-Hammond et al. (2020), professional training equips teachers with innovative teaching strategies, such as project-based learning and interdisciplinary approaches, which are essential for addressing sustainability goals. Teachers with strong communication skills and cultural awareness further create inclusive learning environments that respect diversity and promote equity, crucial pillars of sustainable development. This aligns with findings by UNESCO (2021), which emphasize that teacher competency is pivotal in achieving education for sustainable development (ESD) by fostering knowledge, skills, and attitudes necessary for building a sustainable future.

Conclusion

Based on the findings, it was concluded that curriculum content in early childhood education cover key developmental areas, such as cognitive, social, and emotional growth. Sustainable development in public secondary schools can be significantly advanced through targeted improvements in pedagogical approaches, teacher competencies, and curriculum content. Effective pedagogical strategies such as project-based and experiential learning promote critical thinking and problem-solving skills essential for addressing real-world sustainability challenges. Competent teachers, equipped with the necessary training and resources, are pivotal in fostering students' understanding and commitment to sustainability goals. Furthermore, a well-structured curriculum that integrates sustainability concepts across subjects and aligns with global goals ensures that students are prepared for the complexities of a sustainable future. To achieve these outcomes, the collaborative efforts of governments, school management, educators, and other stakeholders are crucial. By prioritizing investment in professional

development, innovative teaching methods, and curriculum reforms, education systems can empower the next generation to contribute effectively to sustainable development. This integrated approach lays the foundation for creating informed, responsible citizens capable of driving positive change in their communities and beyond.

Recommendations

1. The government should ensure the curriculum aligns with the United Nations' Sustainable Development Goals (SDGs), particularly Goal 4.7, which emphasizes education for sustainable development.
2. School management should ensure access to modern teaching resources, including digital tools and interactive materials, that support innovative pedagogical methods. Resources such as online learning platforms, sustainability-focused textbooks, and outdoor learning spaces can enhance students' understanding of sustainability issues.
3. The government and school management should invest in providing schools with updated teaching materials, technological tools, and access to sustainability-related resources. This includes creating digital repositories, offering teaching guides on sustainability topics, and forming partnerships with environmental organizations for hands-on teacher training

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