

Education for Sustainable Development and Global Citizenship: Based on Sri Lanka's Thirteen-Year Guaranteed Education Program

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Abstract

This study examined the 13YGEP of Sri Lanka through the theoretical frameworks of ESD and GCED. Positioned within the global agenda of SDG 4, the research investigated the extent to which the 13YGEP contributed to inclusive, equitable, and sustainability-oriented education. The study adopted a qualitative document analysis methodology, supported by descriptive statistical evaluation of enrolment data from 2017 to 2024. Primary policy documents, Ministry of Education reports, and international sustainability education frameworks were systematically reviewed to assess alignment with ESD and GCED principles. Findings indicated that the 13YGEP reflected several core dimensions of ESD, including expanded access to post-compulsory education, vocational skill development, and pathways to employability. The programme also demonstrated potential to promote elements of global citizenship, particularly through career oriented subject streams and life skills components. However, participation rates remained comparatively low in relation to the annual number of students who did not qualify for advanced-level education after the G.C.E. Ordinary Level examination. Structural constraints, including geographical disparities, limited institutional capacity, societal perceptions toward vocational education, and insufficient integration of sustainability competencies within the curriculum, restricted the programme's transformative impact. The study concluded that although the 13YGEP represented a progressive policy reform aligned with global sustainability agendas, deeper curriculum integration, strengthened institutional mechanisms, and socio-cultural reorientation were necessary to fully realize its potential in advancing sustainable development and global citizenship in Sri Lanka.

Keywords: Thirteen-Year Guaranteed Education Programme, Sustainable Development, Citizenship Education, Vocational Education, Inclusive Education, Sustainable Education

Introduction

Education in the twenty-first century is a mechanism for knowledge transmission, but also a transformative force capable of shaping sustainable futures and responsible global citizenship.

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Amid escalating global crises, including climate change, widening socio-economic inequalities, technological disruption, forced migration, and democratic fragility, education systems were called upon to cultivate learners who possessed critical thinking skills, ethical consciousness, intercultural competence, and the capacity for sustainable problem solving. Within this global reform discourse, Education for Sustainable Development (ESD) and Global Citizenship Education (GCED) emerged as central paradigms redefining the purpose and direction of contemporary education.

Under the United Nations 2030 Agenda for Sustainable Development, Sustainable Development Goal 4 (SDG 4) positioned education as both a fundamental human right and a catalytic driver of sustainable development (United Nations, 2015). ESD promoted learning that empowered individuals to make informed decisions and take responsible actions for environmental integrity, economic resilience, and social equity (UNESCO, 2017). GCED complemented this framework by fostering awareness of global interdependence, respect for cultural diversity, commitment to human rights, and active civic participation (UNESCO, 2015). Together, ESD and GCED reoriented education beyond examination performance and economic productivity toward holistic human development and planetary responsibility.

In Sri Lanka, despite a long-standing free education policy and high literacy rates, the secondary education system remained predominantly examination driven. The General Certificate of Education Ordinary Level (O/L) examination functioned as a pivotal gatekeeping mechanism, determining progression into Advanced Level academic streams. A significant proportion of students each year failed to meet the required benchmarks for traditional academic pathways (Ministry of Education, 2023). Historically, this structural filtering contributed to educational exclusion, early school leaving, and subsequent socio-economic vulnerability outcomes that stood in tension with the principles of inclusive and equitable education advocated under SDG 4.

The introduction of the 13YGEP in 2017 represented a critical policy response to this systemic exclusion. By guaranteeing uninterrupted schooling up to Grade 13 and institutionalizing a vocational stream, the reform sought to broaden educational access, diversify learning pathways, and strengthen school to work transitions. From the perspective of ESD, this initiative supported sustainable economic development through skills formation and employability. From a GCED standpoint, it contributed

to social inclusion and equitable participation in national development processes. However, the extent to which the 13YGEP embodied the transformative ideals of ESD and GCED remained underexplored. This study therefore situated the 13YGEP within the conceptual frameworks of ESD and GCED, critically examining whether the reform advanced inclusive, equitable, and sustainability oriented human development in Sri Lanka.

Aim and Objectives

Aim

The aim of this study was to critically examine the 13YGEP in Sri Lanka through the integrated theoretical frameworks of ESD and GCED, situating the reform within the transformative agenda of SDG 4. Rather than approaching the 13YGEP merely as a vocational extension policy, this research conceptualized it as a potential instrument for advancing sustainability-oriented education, inclusive human development, and responsible global citizenship.

The study sought to determine whether the 13YGEP embodied the transformative ethos of ESD and GCED by fostering critical thinking, ethical awareness, socio-environmental responsibility, and equitable participation, or whether it remained confined to a functionalist objective of improving short-term employability within an examination-dominated education structure. In doing so, the research positioned the programme within broader debates on education reform, sustainability transitions, and global citizenship formation in the global context.

Objectives

1. To examine how the 13YGEP reflects the principles of ESD and GCED.
2. To analyze the contribution of the 13YGEP toward inclusive and sustainability-oriented upper secondary education in Sri Lanka.
3. To identify key implementation challenges and policy gaps affecting the effectiveness of the 13YGEP.

Literature Review

Theoretical Framework: ESD, GCED, and Sustainable Vocationalism

The global discourse on ESD has evolved significantly over the past two decades, particularly following the adoption of the United Nations 2030 Agenda for Sustainable Development. UNESCO (2015) defines ESD as education that empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability, and social justice. Unlike traditional educational paradigms that prioritize cognitive achievement, ESD emphasizes transformative learning processes that cultivate critical thinking, ethical reasoning, and systems awareness. Scholars argue that sustainability-oriented education requires a paradigm shift from linear knowledge transmission toward participatory, interdisciplinary, and problem-based pedagogies (Wamsler, 2020). GCED complements ESD by emphasizing learners' understanding of global interconnectedness and shared human responsibility. According to UNESCO (2015), GCED encompasses cognitive, socio-emotional, and behavioral dimensions, encouraging learners to engage actively with global challenges such as inequality, climate change, and social injustice. Reimers (2021) contends that education systems must integrate civic engagement and intercultural dialogue to prepare students for democratic participation in an increasingly interconnected world. These frameworks collectively position education as a primary driver of both local development and global solidarity.

Within the context of vocational education, recent scholarship highlights its critical role in promoting sustainable economic growth and workforce resilience. Silva et al. (2026) emphasizes that vocational education must incorporate environmental sustainability and ethical production practices to contribute meaningfully to long-term development goals. However, empirical research also identifies persistent challenges to this ideal, including deep seated societal stigma, structural funding limitations, and insufficient industry integration, particularly within developing economies (Oketch & Lolwana, 2020).

Empirical Background

Historical Trajectory of Educational Reforms in Sri Lanka

In Sri Lanka, educational reforms have historically oscillated between academic centrality and vocational diversification. During the colonial period, formal

education largely served administrative and clerical functions, deeply embedding white-collar aspirations into the socioeconomic fabric and cultural psyche. Post-independence reforms, particularly the landmark Kannangara reforms, attempted to disrupt this bias by introducing rural education initiatives that integrated agriculture and craft-based learning. However, a pervasive societal preference for academic achievement over manual or technical labor persisted. Subsequent interventions sought to address this imbalance with varying degrees of success.

The 1963 Work Oriented Education Initiative attempted to bridge the gap between formal schooling and livelihood skills, yet highly inconsistent implementation and policy fragmentation weakened its long-term impact. The 1972 and 1998 Reforms reintroduced pre-vocational and technical subjects at junior secondary levels. While these efforts demonstrated a continuous policy recognition of national skill development needs, the vocational streams remained structurally and culturally marginalized within the broader, highly competitive examination driven system. The 2013 Advanced Level Technology Stream signaled a renewed institutional commitment to diversifying secondary educational pathways, laying the groundwork for more comprehensive structural interventions (NIE, 2018).

The Thirteen-Year Guaranteed Education Programme

Building upon this historical trajectory, the Ministry of Education introduced the 13YGEP to formally institutionalize vocational pathways at the senior secondary level (Grades 12 and 13). By removing the filtering barrier of the G.C.E. (O/L) examination, the policy aims to ensure a compulsory 13-year educational lifecycle for all students, aligning with the state's broader economic visions to transform Sri Lanka into a skilled knowledge hub (Central Bank of Sri Lanka, 2017).

However, local literature exposes a persistent historical disconnect between policy design and practical implementation. Decades ago, Hewapathirana (1997) identified a critical structural failure, noting that nearly 80% of students who did not pass the O/L examination entered the workforce as unskilled job seekers. Subsequent study by Edirisinghe (2016) confirmed that Sri Lankan schools exhibited limited institutional commitment to vocational knowledge, relying on rigid teaching methods that failed to equip students with functional employability skills.

Recent empirical data demonstrate that these historical deficiencies continue to undermine the modern 13YGEP architecture. Status assessments conducted in localized educational zones reveal that despite comprehensive policy guidelines, severe resource and infrastructural deficits persist (National Human Resources Development Council of Sri Lanka, 2024). Many school laboratories lack the modern equipment, specialized subject rooms, and digital tools necessary to deliver the 26 applied vocational subjects effectively. Furthermore, the program is severely constrained by a shortage of professionally trained, permanent vocational teachers, forcing schools to rely on temporary external instructors, which compromises instructional consistency and pedagogical quality (National Human Resources Development Council of Sri Lanka, 2024).

These systemic limitations heavily distort the economic outcomes of the program. While global literature indicates that vocationally trained individuals generally secure employment faster (Hanushek et al., 2017), localized comparative research paints a more complex picture. Jayaratne and Prabodhani (2024) observed that students who opted out of the 13YGEP to enter the workforce immediately due to immediate economic necessity often earned higher short-term wages than program graduates, effectively treating raw, informal work experience as equivalent to or superior to formal vocational schooling. On a positive note, their findings also highlight that 13YGEP graduates exhibit a higher propensity for self-employment and entrepreneurial activity, suggesting that the curriculum possesses the raw potential to foster economic independence if structurally supported.

The Mechanics of Societal Stigma and the Analytical Gap

The primary barrier to the transformative potential of the 13YGEP remains a deeply entrenched cultural and societal stigma. Recent provincial evaluations indicate that student enrollment in the vocational stream remains critically low compared to traditional academic streams like Arts, Commerce, and Science (National Education Commission, 2024). This low enrollment is driven by persistent negative perceptions among parents, teachers, and students alike, who continue to view the vocational stream as a secondary alternative or a safety net exclusively designed for low-achieving students who failed to qualify for traditional Advanced Level streams.

This cultural hierarchy is reinforced by practical anxieties; parents and students express deep concerns regarding the lack of clear vertical mobility, as the

program often fails to provide explicit, recognizable pathways to higher academic degrees or professional certifications (National Education Commission, 2024). Consequently, the vocational stream is frequently perceived as a terminal dead-end rather than a prestigious educational pathway.

This review of the literature reveals a significant, dual-layered analytical gap:

1. The Methodological and Chronological Gap

While historical research established the foundational flaws of vocational education in Sri Lanka, modern empirical literature (such as the 2024 assessments) focuses almost exclusively on administrative, logistical, and infrastructural challenges or basic enrollment metrics.

2. The Conceptual Gap

There is an absolute scarcity of research examining how the modern 13YGEP curriculum and its actual classroom execution embed the qualitative dimensions of ESD (environmental sustainability, resource conservation, ethical production) and GCED (social justice, global civic responsibility, and systemic thinking).

This study addresses this gap by moving beyond simple logistical critiques. By evaluating the 13YGEP through the dual conceptual lenses of ESD and GCED, this study critically assesses whether Sri Lanka's milestone vocational reform is truly cultivating sustainable, globally conscious citizens, thereby situating local educational policy within contemporary global sustainability discourse.

Methodology

This study employed a qualitative document-based research methodology to critically examine the 13YGEP through the conceptual frameworks of ESD and GCED. The study primarily relied on qualitative policy and literature analysis, supported by descriptive statistical interpretation of publicly available enrollment data.

Primary data sources included the Ministry of Education Circular No. 37/2017, Annual School Census Reports published between 2017 and 2024, policy reports related to vocational education, and UNESCO frameworks on ESD and GCED. In addition, recent scholarly literature published between 2020 and 2024 was reviewed to

contextualize the programme within broader discussions on sustainability-oriented education, vocational pathways, and global citizenship competencies.

Data collection involved the systematic review of official government publications, online institutional databases, UNESCO reports, and peer-reviewed academic journal articles. Descriptive statistical data relating to student enrollment in the vocational stream were extracted from Annual School Census Reports to identify national participation trends associated with the 13YGEP between 2017 and 2024. The analysis focused on publicly available national level enrollment figures concerning students who did not qualify for the G.C.E. Advanced Level examination, and those subsequently admitted to the vocational stream.

The study did not employ primary field-based surveys or inferential statistical generalizations. Instead, the findings were interpreted as a policy oriented qualitative analysis based on available national documents and enrollment records. Thematic analysis was used to identify recurring themes related to inclusivity, sustainability, vocational education, structural implementation constraints, and global citizenship dimensions. Given the document-based nature of the study, the conclusions are limited to the interpretation of existing policy documents, institutional reports, and available statistical records. Therefore, the findings should be understood as indicative of implementation patterns and policy level trends rather than definitive system wide causal conclusions.

Results and Discussion

Educational Access

The 13YGEP aligns directly with SDG 4's emphasis on equitable access by guaranteeing continued schooling regardless of O/L performance (Figure 1). Structurally, this reduces early educational termination and expands opportunity. However, access remains uneven across regions. Only a proportion of government schools offer vocational streams, leading to geographic disparities. Rural and remote districts often lack infrastructure, equipment, and trained instructors, limiting equitable participation. Thus, while the policy framework promotes inclusion, implementation gaps constrain its full realization.

Figure 1

Post-O/L Educational Pathways (2023) and Availability of the Vocational Stream in Govt. Schools

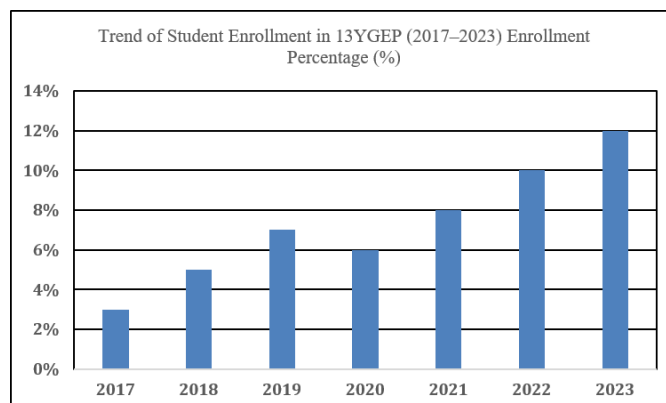


Enrollment Trends and Participation Gaps

The increase in enrolment from 3% to 12% between 2017 and 2023 reflects incremental progress (Figure 2). Nevertheless, most students who fail to qualify for academic streams do not enter the vocational pathway. Many reattempt examinations, enroll in private institutions, or exit formal education entirely. Factors contributing to this participation gap include limited awareness of vocational opportunities, transportation challenges, insufficient school coverage, and parental preference for academic re-entry. These structural and socio-cultural barriers weaken the programme's inclusivity objectives.

Figure 2

Trend of Student Enrollment in 13YGEP



Social Sustainability and Cultural Perceptions

From a social sustainability perspective, education should promote dignity, equity, and social cohesion. Although the 13YGEP structurally recognizes diverse talents, vocational education continues to face stigma. Academic qualifications are often viewed as superior, reflecting historical hierarchies shaped during colonial administration and reinforced by competitive examination systems. Such perceptions discourage high performing or ambitious students from selecting vocational streams, perpetuating stratification. Sustainable transformation therefore requires not only institutional reform but also cultural change that redefines the value of skilled professions.

Economic Sustainability and Employability

Vocational education directly supports economic sustainability by equipping students with employable skills and entrepreneurial competencies. The awarding of NVQ Level 4 certification strengthens alignment between school-based training and national qualification frameworks. In sectors such as construction technology, information technology, and agriculture, demand for skilled labour remains significant. International research indicates that well-designed vocational systems reduce youth unemployment and enhance productivity (World Bank, 2019).

However, stronger industry partnerships are essential to maximize impact. Apprenticeships, workplace exposure, and employer collaboration improve the relevance and credibility of vocational training. Without sustained private-sector engagement, there is a risk that curricula may not fully align with evolving labour market needs. Thus, economic sustainability depends on continuous curriculum review and industry integration.

Environmental Sustainability Integration

Although ESD emphasizes environmental responsibility, environmental sustainability within the 13YGEP remains insufficiently integrated. Some vocational subjects indirectly address sustainability concepts, yet systematic incorporation of green skills such as renewable energy technologies, climate resilient agriculture, waste management, and sustainable construction practices is limited. Embedding environmental ethics and sustainable production principles across vocational modules would strengthen alignment with national and global climate commitments.

Integrating sustainability explicitly into technical training can prepare students for emerging green economies while fostering responsible citizenship.

Global Citizenship Competencies

The vocational stream encourages practical problem-solving, collaboration, and innovation competencies aligned with GCED's behavioural domain. However, explicit integration of global citizenship elements remains limited. Knowledge of global challenges, intercultural communication skills, ethical entrepreneurship, and civic participation require deliberate curricular design. Incorporating community service projects, sustainability campaigns, and socially responsible enterprise initiatives could enhance GCED outcomes. Strengthening these dimensions would position vocational graduates not only as skilled workers but also as informed and engaged citizens.

Current Situation Analysis

A persistent concern among stakeholders in Sri Lanka's education sector is the adequacy of student enrollment in the vocational stream compared to the significant number of students failing the G.C.E (O/L) examination in government schools. A notable issue is that not all students who fail this examination are directed toward vocational education, leading to inefficiencies in addressing their educational and career development needs. Table 1 highlights the annual statistics of students who did not qualify to advance to the G.C.E Advanced Level examination, underscoring the scale of this challenge.

Table 1

Number of Students Who Did Not Qualify for the Advanced Level (2015 -2024)

Year	Number of failed students	Percentage
2015	96,000	30.06%
2016	86,000	26.95%
2017	85,571	20.91%
2018	77,904	24.91%
2019	82,426	26.16%
2020	84,537	25.49%
2021	79,339	25.49%
2022	81,616	25.69%
2023	80,234	%24.97
2024	85,678	26.55%

(Source: Annual School Census Reports, 2015 – 2024)

According to the Annual School Census Report (2024), Sri Lanka has a total of 10,096 government schools, of which 525 schools (18%) are implementing this educational stream. To achieve the anticipated outcomes, the students reflected in Table 1 for these schools must be incorporated into the 13YGEP. For instance, in 2023, 80,234 students did not qualify for the G.C.E. Advanced Level examination. However, only 10,163 students have been enrolled in the 13YGEP (Figure 1). Since 2017, the vocational stream for Grades 12 and 13 has been deployed across secondary schools as part of the 13YGEP, explicitly aiming to mitigate student dropout rates among those who do not clear the G.C.E. (O/L) examinations (Ministry of Education, 2017).

Students enrolled in the vocational stream are awarded the Advanced Certificate of Vocational Education upon qualification and are guided toward obtaining NVQ Level 4 certification based on their vocational skills. However, a key challenge in achieving this objective is the limited inclusion of all students who fail the (O/L) in the vocational stream.

Table 2

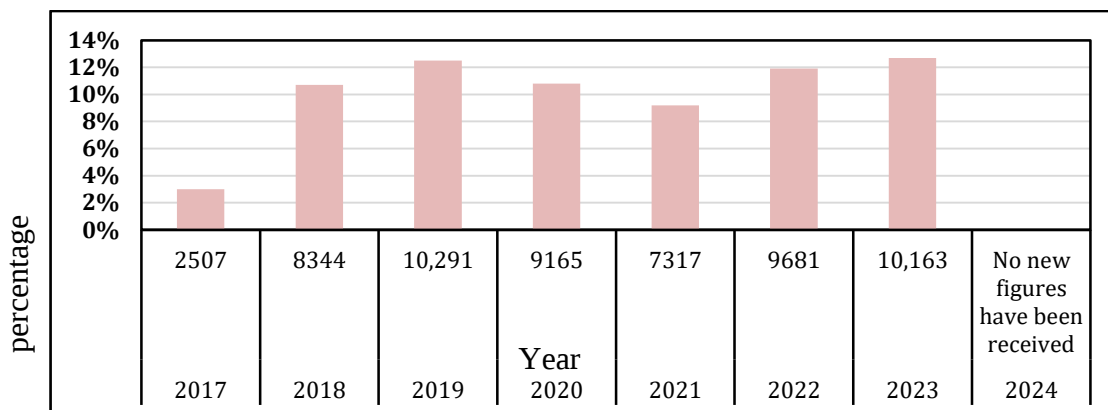
Number of Students Enrolled in Schools in Sri Lanka for 13YGEP (2017 – 2024)

Year	Number of students admitted to 13YGEP	As a percentage of students who failed the O/L
2017	2507	%3
2018	8344	%10.7
2019	10,291	%12.5
2020	9165	%10.8
2021	7317	%9.2
2022	9681	%11.9
2023	10,163	%12.7
2024	No new figures have been received	

(Source: Annual School Census Report, 2024)

Figure 3

As a percentage of students who failed the O/L



As illustrated in Table 2 and Figure 03, only a small proportion of students who fail the (G.C.E) O/L examination have been admitted to schools offering the vocational stream. A significant issue with the 13YGEP is the insufficient enrollment of students, which hinders the achievement of the program's intended objectives. To address this, it is essential to analyze the underlying reasons for low enrollment and develop strategic plans to encourage greater student participation in the vocational stream.

Discussion

The 13YGEP represents a progressive structural reform aligned with international sustainability agendas. Its commitment to inclusive access reflects the normative aspirations of SDG 4. However, sustainability is not merely about structural access; it requires systemic cultural transformation, curriculum innovation, and institutional capacity-building. From a transformative learning perspective, vocational education can cultivate adaptive competencies necessary for navigating global challenges. However, unless environmental literacy and global awareness are explicitly integrated, the programme risks functioning solely as an employability mechanism rather than a sustainability-oriented reform. The participation gap reveals that policy frameworks alone are insufficient to guarantee behavioural change. Addressing perception barriers requires comprehensive public awareness campaigns and visible success stories demonstrating vocational graduates' achievements.

Furthermore, sustainable development requires multi-stakeholder collaboration. Partnerships between schools, industries, local governments, and civil society organizations can create experiential learning opportunities aligned with sustainability goals. Such partnerships also enhance GCED by connecting learners with real-world community issues.

Conclusion and Implications

This study critically examined the 13YGEP in Sri Lanka through the theoretical lenses of ESD and GCED, situating the reform within the global agenda of SDG 4. The analysis demonstrates that the 13YGEP represents a structurally progressive policy intervention designed to address systemic exclusion embedded within Sri Lanka's examination-oriented secondary education system. By guaranteeing continued access to education beyond the G.C.E. O/L examination and institutionalizing vocational pathways within mainstream schooling, the programme reflects a normative commitment to inclusivity, lifelong learning, and equitable opportunity. In principle, these commitments align with international sustainability frameworks that advocate for education systems promoting social justice, economic resilience, and environmental responsibility.

However, the findings indicate that structural alignment alone does not guarantee transformative impact. Despite gradual increases in enrolment since 2017, participation rates remain disproportionately low relative to the number of students who fail to qualify for academic Advanced Level streams each year. This gap highlights the insufficiency of policy guarantees in overcoming entrenched socio-cultural hierarchies privileging academic education over vocational pathways. The persistence of vocational stigma reflects deeper historical and cultural legacies equating academic credentials with social mobility, thereby limiting the perceived legitimacy of career-oriented education. Sustainable reform, therefore, requires not only institutional expansion but also cultural transformation.

From an economic perspective, the 13YGEP contributes to national resilience by equipping learners with industry-relevant skills and pathways to National Vocational Qualification certification, enhancing employability and human capital development. Yet sustainable development encompasses more than economic productivity. ESD demands integration of environmental literacy, systems thinking, and ethical responsibility across curricula. Currently, sustainability principles are

inconsistently embedded across vocational subjects. Incorporating green skills training, renewable energy competencies, climate adaptation knowledge, and responsible production practices would significantly strengthen the transformative potential of the programme.

Similarly, while the 13YGEP indirectly fosters aspects of GCED through collaboration, problem-solving, and practical innovation, the explicit cultivation of global awareness, intercultural competence, and civic engagement remains limited. Embedding community-based sustainability projects, participatory local development initiatives, and ethical entrepreneurship modules could transform vocational education from a skills delivery mechanism into a platform for nurturing globally responsible citizens.

The implications for policy are therefore multi-dimensional. First, structural access must be paired with targeted interventions to destigmatize vocational pathways, including public awareness campaigns, recognition of vocational credentials in national hiring frameworks, and integration of vocational success narratives into educational discourse. Second, curricula must systematically embed ESD principles, making green skills, renewable technologies, and sustainable production practices core components of vocational training. Third, GCED principles should be operationalized through project-based learning that connects students with local communities, industry, and transnational networks, fostering civic engagement, intercultural competence, and ethical problem-solving. Fourth, institutional support is essential for sustainability: professional development for teachers, robust monitoring and evaluation systems, and multi-sector coordination across schools, industry, government, and civil society are critical for long-term impact.

In sum, the 13YGEP holds substantial potential to advance inclusive and sustainable educational transformation in Sri Lanka. Realizing this potential requires coordinated policy action that couples structural expansion with cultural change, curricular innovation, and multi-level institutional support. By positioning vocational education as a strategic instrument of social inclusion, economic resilience, and ecological responsibility, the programme can evolve from a remedial policy response into a foundational pillar of Sri Lanka's transition toward an equitable, resilient, and globally engaged education system.

The findings underscored several key policy implications for enhancing the effectiveness of the 13YGEP:

1. **Expanding Access and Enrolment:** Policymakers needed to address barriers preventing eligible students from enrolling in the vocational stream, ensuring that all students who failed the O/L examination could access continuous education.
2. **Strengthening Career Guidance:** Implementation of structured career counselling and guidance programmes would have supported informed student choices, reduced social stigma, and facilitated alignment with local and global labour market demands.
3. **Integrating ESD and GCED:** The curriculum required explicit integration of sustainable development and global citizenship principles to equip students with critical thinking, civic responsibility, and skills for sustainable livelihoods.
4. **Enhancing School-Industry Linkages:** Partnerships with local and international industries could have provided practical training, internships, and mentoring, improving employability and entrepreneurial capacity.
5. **Monitoring and Evaluation:** Systematic monitoring mechanisms were essential to evaluate student
6. **Outcomes:** identify implementation gaps and refine vocational and academic curricula in line with national and global priorities.
7. **Resource Allocation and Equity:** Equitable distribution of resources ,including qualified teachers, infrastructure, and learning materials ,was crucial to ensure that all students benefited from vocational education regardless of school location or socio-economic status.

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