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ASSESSING THE CONTRIBUTION OF PHYSICS-CHEMISTRY EDUCATIONAL INSPECTORS TO THE INTEGRATION OF EDUCATION FOR SUSTAINABLE DEVELOPMENT IN CONTINUING PROFESSIONAL DEVELOPMENT

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Abstract- This study examines the contribution of physics-chemistry educational inspectors to the integration of Education for Sustainable Development (ESD) into teachers' continuing professional development in Morocco. A quantitative approach was adopted through a national questionnaire carried out during the 2024-2025 academic year to 71 inspectors from a national population of 115. The analysis focused on three dimensions: inspectors' knowledge of sustainable development concepts, their perceptions of ESD aims, and their views on the integration of ESD into Moroccan education policies. The results show limited exposure to sustainable development concepts, especially in continuing professional development, compared with university education and initial inspector training. They also indicate that inspectors generally recognize the importance of ESD, while perceiving its policy integration as cross-cutting, partial, and insufficiently operational. A statistically significant relationship was found between sustainable development knowledge and professional background, although this result should be interpreted cautiously because several cells had low expected frequencies. The study highlights the need to strengthen both initial and continuing training for inspectors in order to improve the implementation of ESD in science teacher professional development.

Keywords Education for Sustainable Development, Educational Inspectors, Continuing Professional Development, Physics-Chemistry Teachers.

1. INTRODUCTION

Interest in Education for Sustainable Development (ESD) has increased significantly in response to growing environmental, social and economic challenges. ESD seeks to help learners understand sustainability issues and act as accountable citizens.

Contemporary societies face complex challenges, including climate change, biodiversity loss, social inequalities and increasing pressure on natural resources. For this reason, integrating sustainable development into education systems has become essential [1]. Education should help learners build knowledge, social representations, relationships, identities and responsibilities. From this perspective, ESD has become a major global concern, reflecting the role of education systems in advancing sustainability-related values and preparing citizens capable of participating in environmental shifts. Schools are therefore encouraged to adopt active pedagogical approaches that engage and empower learners through ESD.

UNESCO played a vital role during COP26 by encouraging countries to strengthen SDG 4, particularly through the integration of climate and sustainability themes into daily teaching practices. SDG 4 serves as a reference for developing knowledge, skills and responsible behaviors through education, while supporting gradual changes in values, attitudes and lifestyles. Morocco aligns with this global dynamic. The adoption of the National Charter for Environment and Sustainable Development on February 7, 2011 reinforced this commitment and placed education at the heart of promoting sustainable values, behaviors and ways of living.

Within this perspective, physics-chemistry inspection may be framed as a sub-system within the education system, responsible for translating political orientations and training resources into concrete measures for continuing professional development. This study therefore offers a system-level assessment of this sub-system's capacity to integrate ESD.

Morocco further translated this commitment into action through Framework Law No. 99-12. Article 17 requires education and training systems, including vocational training, to integrate the law's orientations by incorporating content related to the environment and sustainable development [3]. Thus, education plays a key role in promoting environmental responsibility and sustainability across all levels of training. The adoption of the United Nations 2030 Agenda also emphasized the role

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of education in tackling major development challenges. SDG 4 not only calls for universal access to education, but also quality and inclusivity [4]. ESD is therefore not simply a transversal theme, but a paradigm for educational effectiveness. However, although these objectives are clear internationally, their implementation in education systems, including Morocco, faces complex structural and pedagogical realities [5]. The core problem of this research is to determine the extent to which inspectors' perceptions of citizenship and sustainable development issues are clear enough to be implemented in continuing teacher training. The study aims to produce practical recommendations for strengthening the impact of inspectors on continuing education in physics and chemistry in support of the SDGs, and to pave the way for evaluative studies on support measures in the field [6,7]. Its originality lies in analyzing physics-chemistry inspectors' perceptions of integrating sustainable development into continuing professional development for teachers in Morocco.

In physics and chemistry, sustainable development is directly connected to engineering-related issues such as energy production, transport and storage, materials and their life cycles, pollution and depollution processes, and laboratory risk management. Strengthening inspectors' ESD competencies therefore supports both responsible citizenship and essential scientific and technological skills in STEM fields.

While most existing research focuses on teachers or curricula, this study highlights educational inspectors as strategic stakeholders in disseminating and integrating ESD into the education system.

It also provides an empirical analysis based on a national survey of 71 inspectors, identifying training gaps and possible levers for strengthening ESD in teachers' professional development.

2. THEORETICAL FRAMEWORK

The concept of Sustainable Development (SD) gained international recognition after the 1992 Rio Summit. It is generally based on three interrelated dimensions: economic development, social equity and environmental protection [8]. Environmental issues are now present in political discourse, media, international summits and higher education.

UNESCO emphasizes that global challenges require deep changes in lifestyles and behaviors, supported by new skills and values for more sustainable societies [9, 10]. This idea is expressed in Brundtland's definition of SD as development that meets present needs without compromising the ability of future generations to meet their own needs [11].

From 2005 to 2014, the United Nations Decade of Education for Sustainable Development sought to integrate sustainability values into all forms of learning and to promote behavioral change toward a fairer and more sustainable world. Five learning dimensions were emphasized: understanding, action, personal values, collaboration and societal transformation [12]. At COP26, UNESCO again called on countries to strengthen SDG 4 by embedding climate and sustainability education in school curricula.

SDG 4 functions as a framework for shaping behaviors and skills through education. In this sense, education is a crucial tool for transforming values, attitudes, behaviors and lifestyles in line with sustainable development principles.

Morocco's response to United Nations and UNESCO recommendations has involved approving conventions, agreements and charters from international conferences devoted to environmental protection and ESD, particularly in schools [13]. ESD in Morocco is therefore grounded in the main documents prepared for and issued by these meetings.

ESD enables learners to acquire the skills needed to understand complex sustainability issues and act as responsible, engaged citizens [14]. It also contributes to the achievement of all 17 United Nations Sustainable Development Goals by integrating values such as sustainability, equity and solidarity into teaching practices [15].

ESD is premised on structural principles such as interdisciplinarity, contextualized learning, learner participation and critical thinking [16].

Education in Morocco must prepare learners for a changing world marked by economic, social and environmental transformations [17]. Integrating sustainable development into school curricula helps students understand current environmental and social challenges and encourages responsible action. As climate change, biodiversity loss and resource pressures intensify, education must go beyond information dissemination and develop lasting habits, hands-on skills and responsible attitudes. Morocco demonstrated its commitment through the National Charter for Environment and Sustainable Development, adopted on February 7, 2011. Framework Law No. 99-12 reinforces this direction in Article 17 by calling for education, teaching and training programs to include the principles of the law, especially through content devoted to the environment and sustainable development [19, 20].

Nevertheless, isolated efforts remain limited when confronted with the complexity of reality. A systemic approach is needed, since the environment is composed of interconnected and interdependent elements.

3. CONCEPTUAL FRAMEWORK OF THE STUDY

The integration of ESD into education systems depends on several institutional actors, among whom pedagogical inspectors play a central role in supporting and training teachers. This study proposes a conceptual framework for analyzing the contribution of physics-chemistry inspectors to ESD integration in teachers' continuing education in Morocco. The framework is built around three dimensions:

1. Inspectors' knowledge of sustainable development (SD) concepts.
2. The perception of the objectives of ESD and its educational purposes.
3. Perceptions of the integration of sustainable development into national education policies. These three dimensions influence inspectors' capacity to integrate sustainable development principles into teachers' continuing training. The conceptual model is based on the following assumptions:

- a better knowledge of sustainable development.
- a clear understanding of the goals of ESD.
- a positive perception of its integration into educational policies promotes inspectors' engagement in ESD within science education.

The analytical framework assumes that inspectors' prior exposure to sustainable development during university studies, initial inspector training and professional experience influences their knowledge of SD/ESD concepts. This knowledge then shapes their perceptions of ESD aims and of its integration into national education policies. Together, these dimensions affect inspectors' potential to promote ESD in continuing professional development for physics-chemistry teachers. The study therefore examines whether stronger exposure and knowledge are associated with more favorable perceptions of ESD integration and stronger engagement in training practices.

3.1. Systemic Representation and Mapping of Variables

To reinforce the engineering dimension of this work, the contribution of physics-chemistry inspectors to ESD integration is analyzed as a systemic process. Inspection is considered an institutional support system that receives inputs, transforms them through support mechanisms, and produces outputs in teachers' continuing education.

The main system inputs are:
- inspectors' prior exposure to SD/ESD concepts (university, initial CFIE training, continuing education);
- national and international policy frameworks (Strategic Vision, Framework Law 51-17, New Development Model, Roadmap 2022-2026, SDGs and UNESCO recommendations);
- the professional profile of inspectors (seniority, degree level, career path).

These inputs are processed through mechanisms such as the interpretation of official texts, the design of continuing training modules, classroom visits, training sessions, educational meetings and the dissemination of resources. Inspectors thus translate sustainable development requirements into training practices.

The outputs of the system are:
- the degree of SD/ESD integration into continuing education in physics and chemistry;
- the support provided to teachers in linking scientific concepts to sustainability issues, including energy, materials, risks and the environment;
- global performance indicators, such as system readiness for ESD.

The variables collected by the questionnaire can be mapped to this systemic model:
- Input variables: exposure to SD/ESD at university, CFIE and during the professional career;
- State variables: knowledge of SD/ESD concepts, perceptions of ESD aims, and perceptions of SD integration in education policies;
- Output variables: perceived operationalization of SD/ESD in continuing education and inspection practices.

This representation allows the results to be interpreted not only descriptively, but also as performance indicators of an education system oriented toward engineering and STEM.

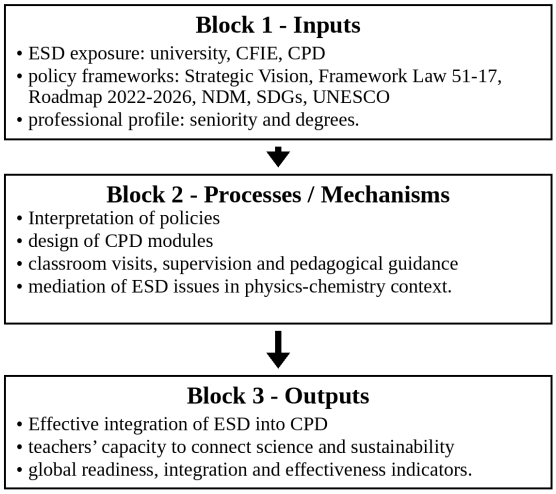

Figure 1. Systemic representation and mapping of variables

4. PROBLEM STATEMENT

This work analyzes inspectors' perceptions of sustainable development as they supervise teachers through classroom visits, meetings and other continuing professional development activities related to the SDGs. It aims to support the qualification of secondary-school inspectors in ESD.

4.1. Primary Objective

To assess physics-chemistry inspectors' perceptions of citizenship and sustainable development issues with a view to integrating them into teachers' continuing professional development.

4.2. Specific Objectives

• Identify inspectors' level of awareness of sustainable development concepts (SD/ESD).
• Examine inspectors' views regarding the aims of ESD.
• Analyze inspectors' perceptions of ESD integration into Moroccan education policy.

The study focuses on educational inspectors' perceptions of sustainable development within their missions of supervision and continuing training for physics-chemistry teachers.

Three research questions guide the analysis:
• What is the level of awareness of physics-chemistry inspectors regarding SD/ESD concepts?
• How do they perceive the aims of ESD?
• To what extent do they perceive ESD integration into Moroccan education policies, including the Strategic Vision, Framework Law 51-17 and the roadmap 2022-2026?

These questions lead to the main research question:

How do inspectors perceive and implement citizenship and sustainable development issues in continuing teacher training?

The main hypothesis is that inspectors' perception and implementation of citizenship and sustainable development issues remain limited because of partial awareness, representations focused mainly on environmental aspects, and a perception of institutional integration as insufficiently operational.

This hypothesis is divided into three specific hypotheses:

• **Hypothesis 1:** Physics-chemistry inspectors have a moderate level of awareness of SD/ESD concepts, with stronger knowledge of environmental aspects than socio-economic dimensions.

• **Hypothesis 2:** Inspectors mainly associate ESD aims with the transmission of scientific knowledge about the environment rather than with cross-curricular education on citizenship and collective action.

• **Hypothesis 3:** Inspectors perceive ESD integration into Moroccan education policies as cross-cutting but partial and largely inoperative.

5. METHODOLOGY

This research adopts a quantitative approach based on a questionnaire administered to physics-chemistry educational inspectors in Morocco during the 2024-2025 academic year.

The questionnaire was distributed nationally to physics-chemistry inspectors across Moroccan regional academies. A total of 71 valid responses were collected from a target population of 115 inspectors, representing a response rate of 61.7%. The instrument included closed-ended items on socio-demographic variables, conceptual knowledge of SD/ESD and perceptions of policy integration. Data were processed using IBM SPSS Statistics 24 through descriptive statistics and cross-tabulation. Pearson's chi-square test was used to examine the relationship between sustainable development knowledge and professional background.

Table 1. Knowledge of sustainable development

Indicator	Item / Corresponding question	Variable type	Expected outcome
Conceptualization of Sustainable Development (SD)	In your opinion, Sustainable Development (SD) is: (single response)	Nominal scale	To understand how inspectors perceive and interpret SD.
Understanding of ESD	In your view, ESD consists of teaching learners to: (single response)	Nominal scale	To examine inspectors' perceptions and conceptual understanding of ESD.
Priority values	ESD promotes multiple values. Please select the two most important ones. (multiple responses)	Nominal scale (multiple response)	To identify the values considered priorities by inspectors.

6. RESULTS AND DISCUSSION

6.1. General Information and Initial Knowledge

Several graphical representations were developed from the survey data to facilitate interpretation.

Table 2. Demographic and professional characteristics of a sample of 71 physics and chemistry educational inspectors in Morocco

Characteristic	Category	Frequency	Percentage
Sex	Female	5	7.0
	Male	66	93.0
Years of Experience	1-5 years	47	66.2
	6-10 years	12	16.9
	11-15 years	6	8.5
	15-20 years	6	8.5
Level of Education	Master's degree	35	49.3
	Bachelor's degree	22	31.0
	Doctorate	12	16.9
	Other	2	2.8
Total	-	71	100.0

The results presented in Table 2 reveal that:

• Gender composition: Male respondents represented 93% of the sample, while female respondents represented 7%. This imbalance reflects the traditionally male-dominated nature of the inspectorate in technical science disciplines such as physics and chemistry.

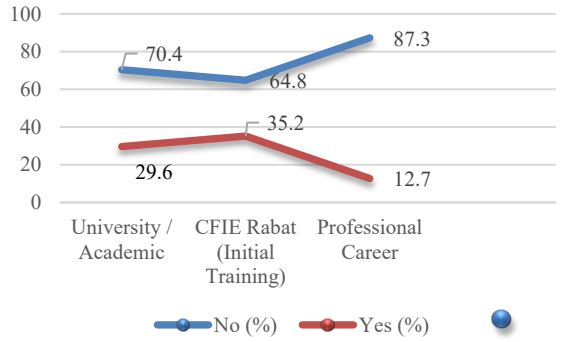

Figure 2. Inspectors' exposure to SD/ESD concepts across three training stages

The key finding is the sharp decline at the in-service stage. Since inspectors support teachers through supervision, guidance and professional development, limited exposure during their career may reduce their ability to translate sustainability principles into training practice. This indicates a structural gap between policy ambitions and the professional preparation of those responsible for pedagogical support in science education.

Practically, the result supports the development of structured in-service modules for inspectors. These modules could strengthen their conceptual mastery of SD/ESD and their capacity to guide physics-chemistry teachers in integrating sustainability themes such as energy, environmental transformations and responsible experimentation.

From a systems-engineering perspective, the survey percentages can be converted into normalized indices from 0 to 1. Professional-career exposure (12.7%) corresponds to 0.13, university exposure (29.6%) to 0.30, and CFIE exposure (35.2%) to 0.35.

A global readiness index for ESD can be calculated as the average of these three indices: $(0.30 + 0.35 + 0.13) / 3 \approx 0.26$. This low value confirms the limited and uneven institutionalization of ESD in inspectors' training pathways.

The same approach may be used to construct a policy integration index, based on inspectors' recognition of ESD in the Strategic Vision, Framework Law, Roadmap and other official documents, as well as a value-priority index based on intergenerational responsibility and the economy-society-environment balance.

6.2. Knowledge of Sustainable Development

The intergenerational definition of SD was the most frequently selected by inspectors (46.5%), showing the influence of the Brundtland formulation, which emphasizes meeting present needs without compromising future generations' ability to meet theirs [21].

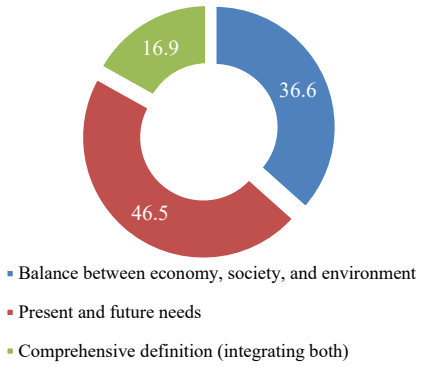

Figure 3. Distribution of conceptions of sustainable development

The three-dimensional balance between economy, society and environment ranked second (36.6%), reflecting the systemic view found in official documents and teaching guides.

Only 16.9% combined both the intergenerational and systemic dimensions, suggesting that a comprehensive conception of SD remains relatively limited.

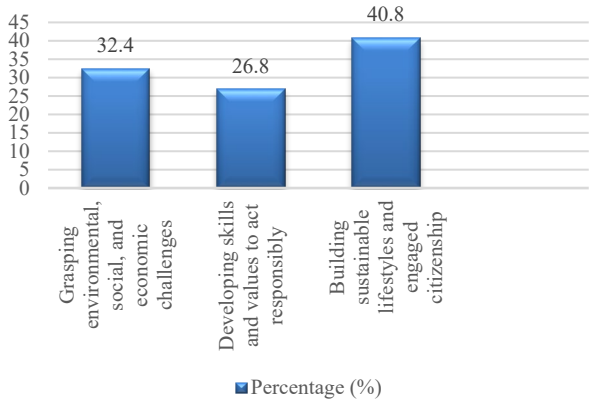

Figure 4. Inspectors' views of ESD aims

Figure 4 shows that "building sustainable lifestyles and engaged citizenship" ranks first (40.8%), followed by "grasping environmental, social and economic challenges" (32.4%) and "developing skills and values to act responsibly" (26.8%). Inspectors therefore tend to view ESD primarily as a means of shaping citizenship and social responsibility rather than as a purely cognitive or technical field.

This finding suggests that inspectors do not reduce ESD to environmental information alone. The prominence of citizenship-oriented responses reflects awareness of the ethical and societal dimensions of sustainability education. However, the lower percentage given to practical skills and values may indicate a gap between conceptual endorsement and pedagogical operationalization.

This result partly nuances the second hypothesis. Respondents give greater importance to sustainable lifestyles and engaged citizenship than to the transmission of environmental knowledge alone. Nevertheless, the moderate score for skills development shows that the practical implementation of ESD remains incomplete and requires further training.

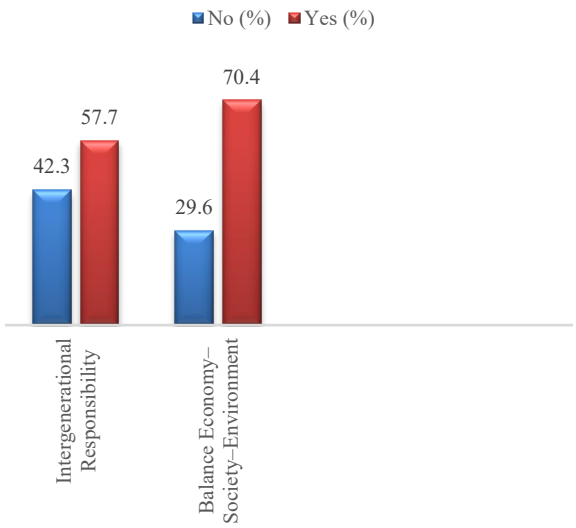

Figure 5. Priority values related to sustainable development among physics-chemistry inspectors

Figure 5 highlights two priority values:

• Intergenerational responsibility: 41 inspectors (57.7%) reported exposure to this value, while 30 (42.3%) did not. This indicates moderate awareness of long-term responsibility.

• Economy-society-environment balance: 50 inspectors (70.4%) reported exposure to this issue, while 21 (29.6%) did not. This cross-cutting issue therefore appears to receive stronger attention within ESD.

Intergenerational responsibility, a key principle of the Brundtland Report, is considered a priority by 57.7% of inspectors, while the economy-society-environment balance is a central pillar of ESD for 2030 [22].

Sustainable Development has attracted worldwide interest since the Brundtland Commission and is commonly understood as a framework balancing economic development, social well-being and environmental protection [23]. Its core idea is to meet today's needs without preventing future generations from meeting theirs.

6.3. Integration into the Educational System

Figure 6 indicates that inspectors perceive the integration of sustainable development into Moroccan education policy as real but uneven. The Strategic Vision

records the highest recognition level (56.3%), followed by the Development Model (43.7%), Framework Law 51-17 (39.4%), the 2022-2026 Roadmap (36.6%) and the National Charter of 1999, which is the least recognized reference in this field. Ministerial notes are seen as reflecting this integration only to a certain extent, reinforcing the idea of partial implementation.

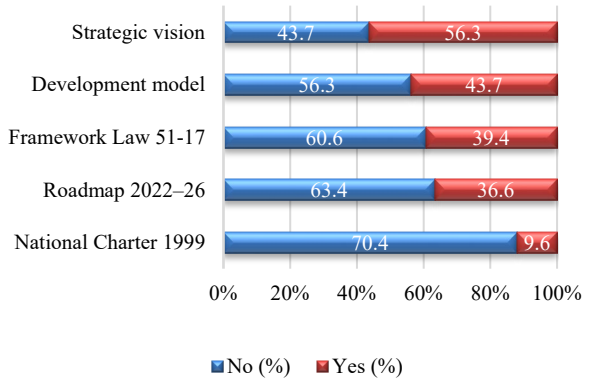

Figure 6. Cumulative percentage distribution (No/Yes)

These results suggest that inspectors identify sustainability more clearly in broad strategic documents than in operational or curriculum-guiding instruments. This points to a policy-practice gap: ESD is visible in national discourse and orientation, but less visible in the tools that organize training content, pedagogical support and classroom implementation.

This interpretation supports the third hypothesis: inspectors perceive ESD integration into national education policy as cross-cutting but partial and insufficiently operative. For continuing professional development, clearer curricular references, training guidelines and inspector support tools are needed to move from symbolic integration to effective practice.

6.4. Case Illustration: Inspector-Led Training Session on Energy Transition in Physics-Chemistry

As a practical illustration, an inspector-led in-service training session may focus on integrating energy transition into the teaching of electricity and energy conversion. The inspector can help teachers link disciplinary content with sustainability issues such as renewable energy, energy efficiency and responsible consumption. Teachers may then redesign classroom activities so that scientific concepts are connected to real environmental challenges. Such a session supports the transformation of classroom practice by making physics-chemistry teaching more contextualized, interdisciplinary and socially relevant, while showing how inspectors can move from policy interpretation to pedagogical mediation.

6.5. Relationship between Sustainable Development Knowledge and Inspectors' Professional Background.

The Pearson chi-square test shows a statistically significant association between SD knowledge and inspectors' professional background ($p = 0.013 < 0.05$). The null hypothesis of independence is therefore rejected.

This suggests that inspectors' professional trajectories are related to their understanding of SD concepts and may influence their pedagogical practices and engagement in promoting ESD.

This result is analytically important because SD knowledge is not randomly distributed across the sample. It is shaped by training pathways and career experience, supporting the conceptual framework's assumption that exposure to sustainability themes and professional background influence how inspectors understand and implement ESD in teacher training.

However, caution is required because 80.8% of cells had expected frequencies below 5, which may affect the validity of the chi-square test. Further analysis using larger samples or alternative methods is recommended.

These results are consistent with Tilbury (2011) [24], who emphasizes that ESD requires a deep transformation of professional practices among educational actors. Pedagogical inspectors therefore play a central role as agents of change, guiding teachers and promoting sustainability principles in teaching and learning.

Similarly, UNESCO (2017) [25] stresses the strategic importance of educational leaders and supervisors in embedding sustainable development within education systems. These actors need both solid knowledge of SD concepts and the ability to translate them into pedagogical action.

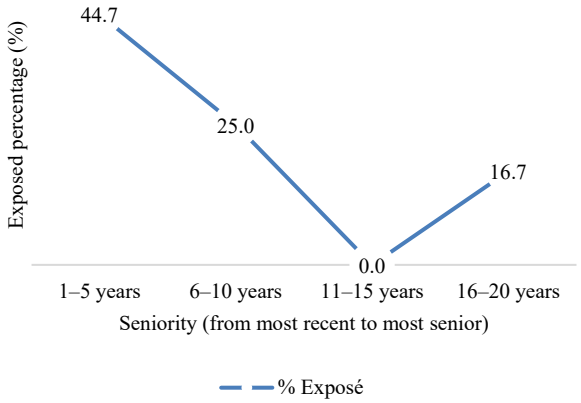

Figure 7. Professional seniority and exposure to SD during initial training at CFIE

Figure 7 complements the chi-square result by showing that exposure to SD during initial training at CFIE varies by seniority. Inspectors with 1-5 years of experience report the highest exposure, whereas those with more than 10 years show very limited or no exposure. This generational contrast suggests that SD inclusion in initial inspector training is relatively recent.

The pattern in Figure 7 helps interpret the association in Table 3. Differences in SD knowledge are likely linked to cohort effects in training provision. Younger inspectors appear to have benefited from recent curricular changes introducing sustainability-related themes, while more experienced inspectors may have entered the profession before such content was institutionalized.

Table 3. Chi-square analysis of the relationship between sustainable development knowledge and professional background

Test	Value	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.453	0.013

From a training perspective, continuing professional development is therefore a corrective mechanism. If recent cohorts are better prepared than older ones, in-service training becomes necessary to reduce disparities between inspectors and ensure more even support for ESD across regions and professional profiles.

These findings also matter for science and engineering-related teaching fields. Previous studies in the International Journal on Technical and Physical Problems of Engineering have emphasized the renewal of physics teaching through experimental, reflective and technology-supported approaches. In [17] showed that experimental and reflective approaches can remediate conceptual errors in mechanics, while ref. [18] highlighted the value of comparing digital and traditional methods in introductory physics experiments. These studies support the present research by showing that innovation in physics-chemistry education requires structured teacher support and professional guidance, in which inspectors can play a central role.

Inspectors can also help teachers connect scientific content to applied technical and engineering challenges. Through inspector-led continuing professional development, themes such as renewable energy, energy efficiency, green chemistry, waste management and responsible experimentation can be integrated more effectively into classroom practice. This gives ESD a stronger operational dimension and reinforces the contribution of science education to both citizenship formation and scientific-technical competencies.

Inspection can thus be considered a training-engineering mechanism positioned between public policy and classroom practice. Strengthening inspectors' tools and knowledge on SD/ESD themes related to energy, green chemistry and resource efficiency can improve the system's capacity to prepare students for scientific and technical careers linked to ecological and energy transitions.

7. CONCLUSIONS

This study examined the contribution of physics-chemistry inspectors to the integration of ESD into continuing professional development in Morocco. The results show that inspectors generally acknowledge the importance of SD and ESD, but their exposure to these concepts remains limited, especially during their professional career. They also indicate that, although ESD appears in Moroccan education policy documents, its integration is often perceived as cross-cutting, implicit and insufficiently operational in training practices.

Professional background is significantly associated with inspectors' knowledge of sustainable development, suggesting that training trajectories influence their capacity to engage with ESD-related issues. This matters because inspectors occupy a strategic position between education policy and classroom implementation, and their preparation directly affects their ability to support teachers in integrating sustainability themes into science teaching.

Beyond its descriptive contribution, this research highlights a structural gap between policy intentions and actual training mechanisms. Its main scientific contribution is to focus on educational inspectors as key mediators of ESD, a perspective less explored than teacher-centered or curriculum-centered approaches. Based on national empirical data, the study provides evidence of training gaps, generational disparities and limits in the operational integration of ESD into continuing professional development.

These findings are also relevant to science and engineering-oriented learning, since physics and chemistry are closely connected to energy, materials, environmental protection, laboratory safety and resource efficiency. Strengthening inspectors' preparation in ESD would therefore contribute to citizenship education and to scientific and technical competencies aligned with sustainable development objectives.

Overall, the study underlines the need to reinforce both initial and continuing training for inspectors through explicit, structured and practice-oriented ESD modules. This would enhance their ability to guide teachers, support interdisciplinary approaches and promote more effective integration of sustainability issues into science education in Morocco.

8. RECOMMENDATIONS

ESD should be firmly embedded in both the initial preparation and continuing professional training of physics-chemistry inspectors in Morocco. These disciplines are particularly relevant because they address themes such as energy, materials, and physical and chemical transformations.

To achieve this, the Inspector Training Centre in Rabat should ensure that ESD training modules include the following points:

- ESD is not a new discipline, but an area where several disciplines converge.
- Each subject, especially science, contains content that can contribute to sustainable development and should do so consistently and progressively.
- Disciplinary contributions must be combined to address complex sustainable development situations.
- Multidisciplinary projects are particularly effective because they provide a practical framework for integrating ESD into everyday teaching and learning, while highlighting its interdisciplinary and cross-cutting nature. The shift from environmental education to ESD should preserve useful previous practices while responding to new sustainability requirements.

Training for physics-chemistry inspectors should also include an ethical dimension. Beyond technical or scientific content, ESD raises questions about values such as solidarity, responsibility, intergenerational justice and respect for life. Integrating these dimensions into initial and continuing training would help inspectors support teachers in adopting a critical, informed and committed stance toward current challenges.

Finally, this initiative could support broader institutional reflection on the place of ESD in curricula, assessment systems and the initial and continuing training of all educational inspectors, with the aim of embedding this approach firmly in educational culture.

APPENDICES

Appendix 1. General Information

- **Sex**

- Female
- Male

- **Professional experience**

- 1-5 years
-6-10 years
-11-15 years
-15-20 years

Appendix 2. Knowledge about Sustainable Development

- Definition of SD: In your opinion, SD is:

- Fulfilling current needs while maintaining the capacity to protect future generations.
- Protecting only the environment.
- Ensuring a balanced relationship between economic development, social well-being and environmental protection, while supporting an economically efficient and socially equitable economy.

- Conception of ESD: For you, ESD means teaching learners to:

- Intergenerational responsibility.
- Intergenerational solidarity.
- Social justice.
- Ecological integrity.
- Peace and democracy.
- Respect for the community of life.

NOMENCLATURES

1. Acronyms

ESD	Education for Sustainable Development
SDGs	Sustainable Development Goals
SD	Sustainable Development
COP26	The 26th Session of Conference of the Parties
UNESCO	United Nations Educational, Scientific and Cultural Organization
CFIE	Training Center for Education Inspectors

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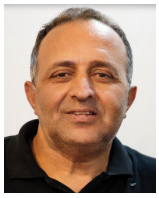
BIOGRAPHIES



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