



Proceeding Paper Understanding ESD: Perceptions and Views from Guatemalan, Nicaraguan, and Costa Rican Educators [†]

Estefanía Pihen González * and Diana J. Arya

Department of Education, University of California Santa Barbara, Santa Barbara, CA 93106, USA; darya@ucsb.edu

* Correspondence: e4educationca@gmail.com

+ Presented at the ICSD 2021: 9th International Conference on Sustainable Development, Virtual, 20–21 September 2021.

Abstract: This study is a descriptive account of participating teachers from Central America during a professional development program designed to support the curriculum integration of education for sustainable development (ESD). The analysis of the collected data provides insights on the participants' initial perceptions and understandings of ESD-associated mechanisms and of social, environmental, and economic sustainability issues. The findings suggest that the majority of the participants (N = 42) made efforts to incorporate sustainability issues into the curriculum regardless of previous ESD training or experience. The participants also demonstrated a need to receive training on the processes, strategies, design tools, and mechanisms for delivering learning about and for sustainability in daily instruction.

Keywords: education for sustainable development; education for sustainability; teacher preparation; sustainability learning



Citation: Pihen González, E.; Arya, D.J. Understanding ESD: Perceptions and Views from Guatemalan, Nicaraguan, and Costa Rican Educators. *Environ. Sci. Proc.* 2022, 15, 45. https://doi.org/10.3390/ environsciproc2022015045

Academic Editors: Cheyenne Maddox and Lauren Barredo

Published: 13 May 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/).

1. Introduction

The intertwining peril of worldwide environmental degradation and social injustice is an unavoidable reality facing us all. Educators must teach about such realities as students are becoming increasingly aware of the disastrous conditions that await them in their adult lives and demand an education useful enough to deal with a dying world (Marris, 2019). In her address to the 2021 UNESCO World Conference on Education for Sustainable Development, Indonesian youth Rajwa Pandhita stated, "Building a whole new lifestyle is not an easy [goal], but slowly and together I'm sure we can do it. But education needs to give us the tools to do this. Learning not just about our planet but for our planet needs to be part of every young person's education, everywhere in the world" [1].

In Central America, climate and sociopolitical crises are disproportionately impacting the marginalized, working population living in underdeveloped regions. Consequently, healthcare, potable water, fuelwood, fisheries, and crop productivity are increasingly scarce and reduced in these regions [2]. Rural communities in Guatemala and Nicaragua account for more than 40% of the population and depend on natural resources to make their basic ends meet [3]. Furthermore, Guatemala has 90.6% of its citizens living at or below the poverty line [4]. Nicaragua is one of the least developed countries in all of Latin America, with little access to basic services (including education) and enough political instability and oppression to incite mass migration to other countries, such as Costa Rica [5,6]. While Costa Rica demonstrates some of the highest literacy rates in Latin America and free access to quality K-12 education, governmental corruption prevails and has led to the unchecked destruction of valuable natural resources and an increasing socioeconomic gap between the communities.

The various sustainability crises affecting such Central American nations have made visible the need for a different kind of education, one that can equip students with the

knowledge and skills needed to move society toward social, environmental, and economic well-being—education for sustainable development (ESD) [7]. ESD focuses on learning about, and actively addressing, sustainability issues; as such, ESD emphasizes a future-oriented, systemic thinking, fostering a learning process facilitated by critical questioning (i.e., raising questions about equity and social justice) and experiential learning designed to foster both innovation and empathy [8]. ESD is a programmatic framework that informs the pedagogical strategies used to engage students in relevant learning. As such, ESD highlights the importance of cultivating the knowledge, the ways of thinking, and the behaviors needed to address the current sustainability challenges [8,9]. ESD educators anchor activities within the local context, hence positioning all members of a learning community as stewards of their land that in turn can make a positive global impact [10].

During the May 2021 UNESCO World Conference on Education for Sustainable Development, more than 2800 stakeholders from the fields of education and environment studies, along with 88 ministers and vice ministers from around the world, signed the Berlin Declaration on Education for Sustainable Development [11]. This agreement commits signatories to transform all pre-K-to-adult education to incorporate ESD as a core, organizing framework. The members are required to identify and rectify socioeconomic gaps and barriers within the respective educational systems and to prepare teachers to incorporate ESD in daily instruction. Given the vast numbers of Central Americans impacted by social injustices and environmental inequities, ESD is a framework worthy of full consideration.

While international research on the adoption of ESD abounds, there is no available literature on this topic for any country in Central America. For countries such as New Zealand and South Africa, researchers report that ESD principles and processes are not properly conceptualized by in-service teachers, school principals, and academic supervisors [12]. Furthermore, teachers in such countries were found to have low eco-literacy levels and little confidence in their own abilities to address such sustainability issues, particularly environmental issues [13]. Findings from a study that compared the environmental education in Finland and the Netherlands suggest that in-service teachers lacked confidence in their own abilities to address [14]. The United States also faces constraints in their teachers' level of mastery and confidence in teaching environmental, social, and economic issues as stand-alone courses or integrated lessons [13]. The findings also highlight the dearth of U.S. teacher education programs providing mandatory ESD training for pre-service teachers; this is the likely source of the teachers' expressed inadequacies [13].

Teachers are key to beginning a successful transition towards ESD. Both pre-service and in-service teachers need to receive high-quality training on ESD pedagogical approaches and resources. All teacher education programs must include opportunities to learn about the causes and consequences of local, regional, and global sustainability issues, along with the current and prospective efforts to address such issues. Current and future teachers must be adequately prepared on how subject-matter instruction can and must be used to deliver an education that meets academic standards and core academic skills while also fostering the goals specific to learning for sustainability. Efforts to provide such training to our teachers must begin with a full exploration into what teachers understand as ESD and what it means to live and work in sustainable ways. We must understand what knowledge and experiences educators have about tools and strategies that are conducive for supporting formal academic instruction that fosters socioenvironmental sustainability. Gaining such baseline understandings can help inform national policies on pre-service and in-service teacher programs to effectively prepare a teaching population that adequately incorporates ESD in its classroom practices. In taking up this imperative, the present study was conducted with the purpose of answering the following research question: what knowledge, perspectives, and experiences do teachers in Central America have with respect to ESD? This study was developed to contribute to the current efforts in preparing educators in Central America to integrate ESD processes and strategies in curricular practices.

2. Materials and Methods

2.1. Recruitment of Participants

The recruitment of participants for this study commenced from October 2020 to January 2021 by utilizing the available social media and professional connections with educators in Nicaragua, Costa Rica, and Guatemala. The call for participants in these countries was delivered as part of an invitation to a freely available professional development event that focused on the design tools and pedagogical approaches for delivering ESD-integrated subject matter instruction. All the potential participants received general information about the event as well as information about the opportunity to participate in this survey study, along with the necessary human-subject approvals. This event was attended virtually due to the COVID-19 pandemic that precluded any in-person interactions. Hence, the online registration included a voluntary 28-question online questionnaire to be completed prior to the PD event. All 42 participants for this event opted to answer this online questionnaire. No additional tasks beyond the completion of the online questionnaire were assigned for the participants as part of this first-phase exploration.

A total of 42 participants joined this study, from which 21 are from Guatemala, 12 from Nicaragua, and 9 from Costa Rica. Two participants identified as male, and the remaining 40 identified as female. At the time of taking the survey, 15 participants were working at a private high school (grades 7 through 11/12), and eight were working at a public high school. Six participants were working at a private elementary school, and three taught at a public elementary school (grades 1 through 6). Three participants were working at a public K-11th/12th grade institution, and one was working at a private K-11th/12th grade institution. Three participants were working at a higher education institution, and two reported not working at any type of formal educational institution at the moment of the survey. Only one participant declined to share their current employment status.

2.2. Data Collection

Due to the virtual nature of the study, the data were collected through a Qualtricsoperated survey. Questions 1 through 14 (Baseline Information) elicited demographic information as well as teaching experience; the participants recorded the number of years and grade levels taught at their current school, the languages they use, and all the subjects they taught at the moment of responding to the survey. Question 16 elicited the participants' conceptual understanding of ESD (ESD Definition), and questions 17, 18, and 19 asked the participants to describe what they perceived to be the most concerning environmental, social, and economic issues at a personal level (Sustainability Concerns). Questions 21, 22, and 23 elicited the level of frequency (ranging from "never" to "nearly daily") at which the participants integrated social, economic, and environmental issues within their teaching of subject matter (ESD Integration). For questions 24 and 28, the participants indicated whether they had received courses or training on ESD during the period prior to working as an educator (Prior ESD Training) or during their in-service work (In-Service ESD Training), respectively. All other questions in this survey (items 20 and 25–27) were not utilized for this study.

2.3. Analysis

The survey responses about the ESD Definition (i.e., item 16) were analyzed by using the principles of grounded theory [15] to identify the emerging themes from the expressed understandings and views of ESD. All responses originally written in Spanish were initially reviewed and codified in their original language. The responses and subsequent codes were then translated into English. Each answer in English was subject to multiple rounds of review to ensure accurate translation of the intended messaging. Notes or memos were taken during analysis to highlight key terms or segments in expressed responses. The process of identifying such key terms/segments was untethered from the ESD framework in order to allow for such codification to emerge from the voices of the participating teachers. The highlighted segments in the responses served as a first level of codes. The review of subsequent responses informed an on-going revision of such first-level codes that were then aggregated into higher-level codes representing broader themes across the participant responses. Higher-level codes were in turn reviewed and revised to ensure that each broad theme accurately represented the participant voices. Forty-two first-level codes and five higher-level codes were produced using this iterative analytic approach (see Figure 1).



Figure 1. The resulting configuration from grounded theory coding. White bulleted phrases feature the first-level codes. The respective higher-level codes are featured in white boxes.

It is important to note that the words sustainability and sustainable were included in the first-level codified responses that alluded to social, environmental, and economic issues, benefits, or components. First-level codes for responses that only mentioned natural resources, environmental issues, or natural environments were coded with one of the environment and natural resources themes in order to adequately clarify among the emergent themes.

Furthermore, the term *futures* was used to code responses related to the benefits of current and future generations.

The higher-level codes detailed in Figure 1 were in turn analyzed against the ESD learning processes and learning strategies, as explained by Tilbury in the report Education for sustainable development: An expert review of processes and learning, commissioned by UNESCO [16]. These include processes of collaboration and dialogue; processes which engage the whole system; processes which innovate the curriculum as well as teaching and learning experiences; and processes of active and participatory learning and the strategies of learning to ask critical questions; learning to clarify one's own values; learning to envision more positive and sustainable futures; learning to think systemically; learning to respond through applied learning; and learning to explore the dialectic between tradition and innovation.

Analysis of the alignment between Tilbury's processes and the strategies and higherlevel codes involved a systematic review of the first-level codes organized by each corresponding higher-level code, followed by a contrastive analysis with the ESD processes and strategies to determine semantic alignment. As such, higher-level codes that contained first-level codes that aligned with one or more process and/or strategy were recorded as concurring with an ESD process and/or learning principal.

The survey questions (i.e., items 17, 18, and 19) related to Sustainability Concerns were coded as described above by following grounded theory coding [15]. The responses were first iteratively reviewed and translated from Spanish to English. The main message in each response was highlighted, and a subsequent list of associative thematic markers was produced for each sustainability concern. As an example, many participants answered that one of the economic issues that concerned them the most was *falta detrabajos* (lack of jobs), *pocos empleos* (few available jobs), *desempleo* (unemployment), or *pocas oportunidades para encontrar empleos* (few opportunities to find jobs). Therefore, these answers were considered to report the same theme of *lack of employment opportunities*. In this way, a list of reported themes for each sustainability issue was generated. Once these lists were generated, the answers for each question were read again, and based on its content, an answer was tabulated under the pertinent theme.

3. Results

3.1. Prior Experience and Education (Baseline Information)

At the time of this survey study, 29 participants reported working in the field of education for over five years, six participants had been working for three to five years, four participants had been working between one to three years, and three participants had been working for less than one year in education. Thirty-five participants had completed an undergraduate degree, five participants held a master's degree, and two had only completed high school. Six participants taught non-core subject courses for elementary and/or high school students, with the remaining bulk of participants representing an evenly distributed range of subjects, including Spanish, social studies, mathematics, science, or a mixture, across undergraduate, graduate, and professional and/or adult education contexts. In addition, 16 of these participants teaching in higher-education contexts were also teaching high school students.

3.2. Prior and In-Service ESD Training

Twenty-two of the 42 participants reported having received training about or information related to ESD and its principles and processes during their university studies or as part of their teacher certification program. Twenty participants reported that they had never received such training or information during their university studies or through their teacher certification program. Twenty-two participants reported having received training or having participated in workshops on ESD as in-service teachers, while 20 reported never having received in-service support.

3.3. ESD Integration

The highest reported frequency of integration for each sustainability issue was *frequently* (several times within an academic period). Fourteen participants reported that they *frequently* addressed environmental issues in class; 15 reported the same for social issues; and 18 reported a frequent integration of economic issues. The second most reported frequency of integration for environmental issues was *very frequently* (11 responses), followed by *always* (eight) and *sometimes* (eight). For social issues, the most frequently selected responses of integration reported were *very frequently* (10 responses), followed by *always* (10). For economic issues, the most frequently selected responses was *very frequently* (seven responses) and *always* (seven). Contrastingly, only one participant reported *never* integrating environmental issues, two reported *never* doing so for social issues, and only three reported the same for economic issues.

3.4. Sustainability Concerns

3.4.1. Environmental Sustainability Concerns

In total, 24 different environmental issues were reported by the 42 participants. Several participants reported more than the two environmental issues requested; as such, the total number of tabulated comments across all environmental issues was 92. The reported issues evenly cited across the representative countries converged the most on deforestation (21 out of 92 comments), follow ed by trash management (16 out of 92), and pollution of freshwater sources (9 out of 92). Guatemalan participants most frequently reported nationwide deforestation as a worrisome environmental issue (12 out of 47 comments), which was the same as for the Nicaraguan teachers (9 out of 29). As for the Costa Rican teachers, trash management and trash pollution were the most frequently mentioned (4 out of 16), but they demonstrated a relatively even distribution of reported concerns.

3.4.2. Social Sustainability Concerns

In total, 31 different social issues were reported by the 42 participants, with 87 tabulated answers across all the reported social issues. Across all three countries, the lack of employment opportunities was reported the most (8 out of 87), followed by violence against women and/or children (intrafamily violence) (7 out of 87), followed by femicides (murders against women committed by partner/spouse), as well as insecurity and violence (6 responses out of 87). Guatemalan participants reported insecurity and violence the most (6 out of 43), while femicides were the most frequently mentioned by Nicaraguan teachers (5 out of 27). Lack of employment opportunities was the social issue reported the most by Costa Rican teachers (3 out of 17).

3.4.3. Economic Sustainability Concerns

In total, 31 different economic issues were reported by the 42 participants, with 89 total instantiations all reporting economic issues. Across all three countries, the lack of employment opportunities was the economic issue reported as the most concerning (28 out of 89), follow ed by low or unjust salaries and high costs of living (11 out of 89) and the COVID-19 crisis (six out of 89). Lack of employment opportunities was the most frequently mentioned economic issue by Guatemalan teachers (15 out of 44 answers) as well as by the Nicaraguan teachers (10 out of 25). The Costa Rican teachers demonstrated broad concern for 15 economic issues (e.g., improper use of financial resources destined for community development; fiscal crisis and elevated taxes in comparison to salaries; and lack of support to small-scale producers and to entrepreneurs), with no attention to one particular topic over another.

3.5. Views on and Understandings of ESD (ESD Definition)

Following the guidelines of grounded theory, the inductive coding of constructed definitions of ESD (number 16, *describe in your own words education for sustainable development*) led to the production of the 42 first-level codes and 5 higher-level codes detailed in Figure 1.

The analysis between the higher-level codes and Tilbury's [16] ESD learning processes and strategies (ESD principles) confirmed that the participants' responses about what their understanding of ESD contained are congruent with the stated principles, although the responses did not capture the entirety of these. In order to illustrate these findings, consider the higher-level code *Sustainable uses of natural resources and environments*. This thematic marker includes first-level codes relating to the common message of development for the conservation and preservation of natural resources and environments for current and future generations, a key goal that partially reflects the ESD process and learning principles. The higher-level code *Sustainability oriented behaviors and ways of thinking* captured the first-level codes associated with behaving, thinking, and/or acting in ways that are environmentally friendly and that include awareness of the impact of personal actions. In addition, the higher-level code *Innovations for sustainability* includes first-level codes that captured messages pertaining to innovation as a key tool for generating solutions to different sustainability issues. Finally, the higher-level code *Integrated curricula and learning* captured first-level codes that emerged from responses about ESD as a type of education that involves non-standardized or alternative teaching approaches and resources designed to foster critical understanding about and active engagement in addressing sustainability issues. Such responses about ESD teaching highlight one key component of teaching under ESD, which is that learning about and for sustainability should be weaved into the instruction of all subjects [17].

While alignment between the participant responses and the ESD principles was observed, none of the responses reflected two key components from the ESD *process of collaboration and dialogue*: building partnerships across social sectors in order to collaborate with and learn from each other and cooperation with governmental institutions or departments [16]. In addition, none of the answers was congruent with, or directly mentioned a crucial message in, the ESD process of *engaging the whole system*; this principle highlights the importance of allowing schools to work with governing bodies, including teacher education programs, to bring about needed transformations related to the various forms of sustainability.

4. Discussion

4.1. Integration of and Knowledge about Sustainability Issues

Participants in this study reported a high frequency of integration of sustainability issues during core and non-core subject lessons. Furthermore, the 14 participants that did not receive any training or exposure to ESD during their pre-service and in-service years reported that they integrated all three kinds of sustainability issues frequently, very frequently, or always. If nearly half of the participants never received formal training on ESD as pre-service teachers or as in-service teachers, why was there such a high number of reports of the integration of sustainability issues into the daily teaching?

The reported responses to the questions about environmental, social, and economic concerns provide useful insights into the reported efforts at integration. Except for one respondent who mentioned expansión del comunismo (expansion of communism) as an economic concern, all the reported sustainability issues are indeed extraordinary and have measurable devastating effects on each country's human and other natural populations. Consider the environmental issues reported most frequently across all three countries: deforestation, followed by trash management and trash pollution, and pollution of rivers/freshwater bodies. The realities and ways of living for many Central American communities are dire; residents in all three countries face neglect by local and central governments and depend on unpolluted rivers and forests to live. Lack of employment opportunities and violence against women and/or children were the social concerns reported most frequently across all three countries, follow ed by femicides and insecurity/violence. To provide a glimpse of the severity of such reported social issues, during 2019 in Latin America, 4640 women were murdered by their partners [18]. Insecurity and violence have been part of the realities of Guatemalans and Nicaraguans for many decades now; political instability, violation of human rights, and limited options for employment dominate everyday life.

Furthermore, the lack of employment opportunities throughout Central America is a catalyst for criminal activities, drug consumption, and forced migration.

It can be concluded that regardless of the country and the mastery of the ESD processes and strategies, the reported high integration of sustainability concerns is motivated by the participants' lived experiences. Whether the participants come from urban or rural areas, they all belong to countries where social, environmental, and economic issues have severe, long-term effects on people's lives. A natural consequence of experiencing such realities for participating teachers is the desire to take action in any way possible, including addressing sustainability concerns in their classrooms. Findings from related studies suggest that one obstacle experienced by teachers from around the globe is their low confidence in their knowledge of sustainability issues [12,13]. For the case of the recruited teachers, their knowledge of sustainability issues was vast, as their expanded answers demonstrated. Many participants reported more than the requested number of sustainability issues, included details about the causes of the reported issues, and their answers were even charged with emotions such as frustration, anger, and feelings of helplessness, as excerpted below: [*L*]*a falta de trabajo y el olvido del gobierno por la clase social media baja y baja, es muy lamentablecomo saleel solo para una clasesocial y la otra partesequeda por completo en el olvido, dando pie a la deliciencia en masa ... el sinsabor de la poca ayuda no tiene otro sabor a desesperación ...* [the lack of work and government's neglect of the middle low and low classes, it is very lamentable how the sun rises for one social class and the other one remains in complete obscurity, causing mass delinquency ... the distaste of the limited help only tastes like desperation ...].

Equally important is the need to question to what extent the reported integration is achieving a key learning goal in ESD—learning for sustainability. Are the lessons from the participants merely exposing students to sustainability issues or are they also introducing efforts, programs, projects, and individuals that are in the forefront of efforts to address local and global sustainability problems? Findings from this study also suggest the need for follow-up research that can provide insights into the integrated lessons produced by the teachers and how such efforts reflect ESD learning strategies such as innovative, systemic, and critical thinking [16]. Future iterations of this project will involve a greater number of participants and include other Central American countries that enable a broader exploration of patterns in respective perspectives and experiences.

4.2. Participants' Understandings and Views of ESD

The internationally reported challenges experienced by teachers when integrating sustainability issues suggests an immediate need to clarify and address the gap in teacher knowledge related to the key mechanisms, processes, and tools associated with ESD. The design and implementation of an *effective* ESD teacher training program should consider what teachers understand and know about ESD. As such, the data from this study provide an important starting point for future research aimed at supporting efforts for advancing ESD training for teachers in Central America. The process of coding participant responses helped to clarify the perspectives of our participants about ESD. While individual answers on the understanding of ESD did not detail every principle reported by Tilbury (2011), all 42 participants, regardless of their level of mastery or exposure to the field, answered with a message that aligned with at least one of these principles. This observation indicates that participants have some level of informed perceptions about ESD. That stated, all Central American educators must receive proper training on the learning processes, teaching strategies, design tools, and mechanisms to adopt and deliver an education fully shaped by the principles of ESD. An example of this need is evidenced in the recent first annual ESD and EE-related conference for Central American schools and educators. The first author of this study supported the organization of this event. A recurrent message she noted from conference participants was the interest and efforts for becoming more knowledgeable in ESD due to the severe conditions experienced in their communities. Many of these individuals expressed a lack of support or approval from respective supervisors for teaching about sustainability issues. Such reports run counter to the widely held sentiment recently voiced by Germany's Chancellor Angela Merkel: "We need training for sustainable development not to be a privilege but accessible to all people..." [1]

A second key finding from this study was that none of the participants' responses reflected a crucial goal from two ESD learning processes—the *process of collaboration and dialogue* and the *process of engaging the whole system* [16]. As previously mentioned, this goal refers to needed collaborative support from governmental bodies and teaching education programs. Such fundamental partnerships might be impossible in countries experiencing political instability, corruption, and regulatory bodies resistant to progressive change in education. This finding raises the question, how can collaboration with such governing institutions be achieved in countries where those in power do not allow it? What processes

and strategies need to be added to the UNESCO ESD report [16] that will support teachers who live in countries governed by systems resistant to transformation?

While the embracing of ESD by teachers is key for achieving a nationwide adoption of its processes and principles, those in charge of deciding what is included in teacher education programs in Central American countries represent one of the biggest barriers to nationwide adoption of ESD. Further research is needed on the academic performance and social and environmental engagement of Central American students learning at schools where ESD processes are fully acknowledged and enacted. Such research may be helpful in loosening the authoritative grip that governmental leaders in Central American countries have on school policies and training programs that preclude ESD education.

Hence, this study represents the initial phase of a larger effort to determine the most efficient pathways to bring ESD training to educators in Central America, regardless of the level of governmental support. The next phases of this study will include further exploration into the processes and mechanisms that are key for adopting ESD and the approaches for building a resilient framework that effectively withstands the political, social, cultural, and financial hardships facing Central Americans.

Author Contributions: Conceptualization, E.P.G.; methodology, E.P.G. and D.J.A.; validation, D.J.A.; formal analysis, E.P.G.; investigation, E.P.G.; resources, D.J.A.; data curation, E.P.G.; writing—original draft preparation, E.P.G.; writing—review and editing, D.J.A.; visualization, E.P.G.; supervision, D.J.A. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Institutional Review Board (or Ethics Committee) of the University of California, Santa Barbara (protocol code 5-20-0715, approved on 16 October 2020).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

References

- UNESCO. Available online: https://en.unesco.org/news/unesco-declares-environmental-education-must-be-core-curriculumcomponent-2025 (accessed on 1 June 2021).
- Earth.Org. Available online: https://earth.org/climate-change-is-causing-a-migration-crisis-in-central-america/ (accessed on 1 May 2021).
- 3. The World Bank. Available online: https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=ZJ (accessed on 1 May 2021).
- 4. IWGIA. Available online: https://www.iwgia.org/en/guatemala/3622-iw-2020-guatemala.html (accessed on 20 February 2021).
- 5. The World Bank. Available online: https://www.orldbank.org/en/country/nicaragua/overview (accessed on 1 May 2021).
- 6. Datosmacro. Available online: https://datosmacro.expansion.com/demografia/migracion/inmigracion/costa-rica (accessed on 6 February 2021).
- Laurie, R.; Nonoyama-Tarumi, Y.; Mckeown, R.; Hopkins, C. Contributions of Education for Sustainable Development (ESD) to Quality Education: A Synthesis of Research. J. Educ. Sustain. Dev. 2016, 10, 226–242. [CrossRef]
- Hopkins, C. Chapter 2: Education for Sustainable Development in Formal Education in Canada. In Schooling for Sustainable Development in Canada and the United States, 1st ed.; Rose, M., Ed.; Springer: Dordrecht, WA, USA, 2013; Volume 1, pp. 23–36.
- 9. Nolet, V. Chapter 1: Education for Sustainable Development in Formal Education in Canada. In *Schooling for Sustainable Development in Canada and the United States*, 1st ed.; Rose, M., Ed.; Springer: Dordrecht, WA, USA, 2013; Volume 1, pp. 3–22.
- 10. Briggs, L.; Trautmann, N.M.; Fournier, C. Environmental education in Latin American and the Caribbean: The challenges and limitations of conducting a systematic review of evaluation and research. *Environ. Educ. Res.* **2018**, *24*, 1631–1654. [CrossRef]
- 11. UNESCO. Available online: https://en.unesco.org/sites/default/files/esdfor2030-berlin-declaration-en.pdf (accessed on 1 June 2021).
- 12. Bolstad, R. Environmental Education: A Place in the Curriculum? NZAROE 2005, 14, 215–235. [CrossRef]
- Feinstein, N. Chapter 3: Education for Sustainability in the K-12 Educational System of the United States. In *Schooling for* Sustainable Development in Canada and the United States, 1st ed.; Rose, M., Ed.; Springer: Dordrecht, WA, USA, 2013; Volume 1, pp. 37–52.

- 14. Muranen, J. The Importance of Out-of-School Environmental Education Entities for Integrating Environmental Education into School Curriculum: Perspectives from Finnish and Dutch Environmental Education Experts. Ph.D. Thesis, University of Tampere, Tampere, Finland, 2014.
- 15. Charmaz, K. Constructing Grounded Theory, 2nd ed.; SA GE: London, UK, 2014; pp. 232–377.
- 16. Tilbury, D. Education for sustainable development: An expert review of processes and learning. UNESCO 2011, 1, 1–132.
- 17. McKeown, R.; Hopkins, C. EE p ESD: Defusing the worry. J. Environ. Educ. 2003, 9, 117–128. [CrossRef]
- 18. Agencia EFE. Available online: https://www.efe.com/efe/america/sociedad/los-feminicidios-en-america-latina-crecieron-un-31-5-2019-segun-la-cepal/20000013-4403747 (accessed on 10 January 2021).