

«A New Global Ethic»: A History of the United Nations International Environmental Education Program, 1975-1995

Charles Dorn

email: cdorn@bowdoin.edu

Bowdoin College. United States

Abstract: In 1975, the United Nations, under the auspices of its Educational, Scientific and Cultural Organization (UNESCO) and Environment Program (UNEP), established the International Environmental Education Program (IEEP). For two decades, IEEP aimed to accomplish goals ascribed to it by UNESCO member states and fostered communication across the international community through *Connect*, the UNESCO-UNEP environmental education newsletter. After reviewing UNESCO's early involvement with the environment, this study examines IEEP's development, beginning with its conceptual grounding in the 1968 UNESCO Biosphere Conference. It examines the 1972 United Nations Conference on the Human Environment held in Stockholm, moves on to the UNESCO-UNEP 1975 Belgrade Workshop, and continues with the world's first intergovernmental conference dedicated to environmental education held in Tbilisi in 1977. The paper then uses *Connect* to trace changes in the form and content of environmental education. Across two decades, environmental education shifted from providing instruction about nature protection and natural resource conservation to fostering an environmental ethic through a problems-based, interdisciplinary study of the ecology of the total environment to adopting the concept of sustainable development. IEEP ultimately met with mixed success. Yet it was the primary United Nations program assigned the task of creating and implementing environmental education globally and thus offers a particularly useful lens through which to analyze changes in the international community's understanding of the concept of the environment over time.

Keywords: Environmental Education; United Nations; UNESCO; Stockholm; Belgrade; Tbilisi.

Recibido / Received: 17/02/2020

Aceptado / Accepted: 27/04/2020

1. Introduction

In 1975, the United Nations, under the auspices of its Educational, Scientific and Cultural Organization (UNESCO) and Environment Program (UNEP), established the International Environmental Education Program — the first coherent program for

environmental education articulated at the global level and supported by over 113 member states along with another 400 intergovernmental and non-governmental organizations (Pace, 1996, p. 1). For two decades, the program aimed to accomplish goals ascribed to it by the U.N. and fostered communication across the international community through *Connect*, the UNESCO-UNEP environmental education newsletter.

Although responsibility for preventing environmental destruction appears nowhere in UNESCO's constitution, the organization incorporated nature protection and natural resource conservation into its mission soon after being established in 1946. In this work, UNESCO was both more comprehensive and less utilitarian than other United Nations specialized agencies, which tended to define the natural world in circumscribed ways. The World Bank, for instance, approached natural resources as commodities; it sought to negotiate agreements to protect those resources primarily as a means to prevent international conflict over scarcity¹. Alternatively, UNESCO and its affiliate organization, the International Union for the Protection of Nature (IUPN), were concerned with «the preservation of the entire world biotic community» (quoted in Meyer, 2017, p. 47). This conception, according to Jan-Henrik Meyer, encompassed a range of political, economic, and social concerns and reflected «a modern global ecological conception of nature and the environment as well as the mid-twentieth-century concern about resource conservation» (p. 47).

UNESCO and IUPN claimed that human beings maintained a relationship to the natural world and that successfully protecting nature and conserving natural resources necessitated engaging the social and cultural dimensions of community life, including local traditions (such as farming practices) as well as what elders taught children and youth about nature. «The protection, conservation, and utilization of nature is one with many facets» claimed UNESCO in 1949, «and one which international organizations, as well as humble individuals like shepherds and ploughman, much face» (Gille, 1949, p. 4). Accordingly, the two organizations engaged the issue of environmental education far earlier—and in much greater depth—than other U.N. bodies. The global political realignment engendered by the Cold War, however, soon disrupted UNESCO's effort to develop an international program oriented around environmental awareness as well as many of its other educational projects². As education is an inherently political enterprise, UNESCO's educational programming was especially vulnerable to growing tensions between Soviet bloc countries and U.S.-led Western democracies in the decades immediately following World War II. Almost twenty years passed before the organization returned to a position of leadership in the field of environmental education.

Resulting directly from recommendations made by the United Nations Conference on the Human Environment held in June 1972 in Stockholm, the establishment of the International Environmental Education Program (IEEP) marked that return. Delegates to the landmark gathering in Stockholm did not specify a form of environmental education they believed UNESCO should develop. Instead, they proposed an expansive program «interdisciplinary in approach, in school and out

¹ On the United Nation's approach to the environment broadly, see (Conca, 2015).

² See, for instance, (Preston, Herman, & Schiller, 1989), Chapter Six.

of school, encompassing all levels of education and directed towards the general public»³. Consequently, IEEP was designed to include elementary, secondary, and tertiary education as well as youth and adult programs and teacher training. The program's conceptual framework, which originated in discussions at UNESCO's 1968 Biosphere Conference, called for examining the ecology of the natural world as well as the political, economic, social, and cultural domains comprising the biosphere. Frequently referred to as the «human» or «total» environment, this idea fundamentally influenced the character of environmental education as well as the curriculum related to it. Moreover, IEEP provided an international platform for a progressive model of educational practice. Problem-based and anchored in community needs, it sought to teach an awareness and understanding of environmental issues along with the «knowledge, skills, attitudes, motivations and commitment» to develop solutions to environmental decline⁴.

A watershed moment in the evolution of environmental education occurred early in IEEP's history when, at the conclusion of a UNESCO workshop held in Yugoslavia in 1975, participants adopted the «Belgrade Charter» Later described by UNESCO and UNEP as a «preliminary frame of reference» in establishing an international program of environmental education, the Charter called for a «new global ethic» that espoused «attitudes and behaviours for individuals and societies which are consonant with humanity's place within in the biosphere»⁵. Rather than reaffirming more circumscribed goals such as preventing habitat destruction or preserving wildlife, the Charter challenged existing forms of economic development, declared education central to fostering an environmentally responsible international community, and thrust into international deliberations the conviction that environmental education included a moral and ethical dimension.

IEEP has been treated by scholars as little more than a footnote in the history of the global environmental movement⁶. While renown international organizations such as the World Wildlife Fund, landmark international conferences such as the Rio «Earth Summit» and major international events such Earth Day have all received generous scholarly attention, the history of IEEP remains unexamined. This study remedies that shortcoming. It begins with IEEP's conceptual grounding in the 1968 UNESCO Biosphere Conference, continues through Stockholm, moves onto the Belgrade Workshop, and includes the world's first intergovernmental conference dedicated to environmental education held in Tbilisi, Georgian Soviet Socialist Republic, in 1977. Although much work in establishing an international program in environmental education occurred outside of these venues, they serve as both important events

³ «Item 13.3 of the Provisional Agenda: Report on the Work of the United Nations Conference on the Human Environment and its Implications for UNESCO» UNESCO General Conference, Seventeenth Session, Paris, 1972, 17 C/65, 12 October 1972. Paris: UNESCO, 9-10.

⁴ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 1, No. 1, January 1976, Paris: UNESCO, 2.

⁵ «Activities of the Unesco-UNEP International Environmental Education Programme (1975-1983)» ED. 84/WS/36, Paris: UNESCO, 1984; «The Belgrade Charter: A Framework for Environmental Education, 22 October 1975,» Paris: UNESCO, 1.

⁶ See, for instance, (McCormick, 1989).

and chronological markers in delineating the historical development of environmental education throughout the world (Conca, 2015, p. 9).

Using *Connect* to trace changes in the form and content of environmental education across two decades, the study demonstrates how environmental education shifted from providing instruction about nature protection and natural resource conservation to fostering an environmental ethic through a problems-based, interdisciplinary study of the ecology of the total environment to the adoption of the concept of sustainable development. *Connect* dedicated each issue to a general theme, offering insight into the ideas and events UNESCO-UNEP assigned greatest importance, while also providing news regarding on-going projects. Characterized as an environmental education «switchboard» the newsletter was initially published in three languages – later, eight – and was distributed to over 200,000 institutions, agencies, and individuals. As IEEP's first vehicle for the «diffusion of information» across the «environmental education communications system» *Connect* provides a crucial source of information on both IEEP and the kinds of environmental education it championed over time⁷.

Characteristics of nations' political systems, levels of economic development, and communities' social and cultural norms have historically overridden the capacity of any international organization to directly affect domestic educational reform. This was no less true in the field of environmental education. Ultimately, then, IEEP claimed only mixed results. Yet as the primary United Nations program assigned the task of creating and implementing environmental education globally, IEEP's development offers a particularly useful lens through which to analyze changes in the international community's understanding of the environment. As scholars have recently observed, current parlance for «the environment» came into common use only following World War II (Warde, Robin & Sörlin, 2018). UNESCO's responsibility for designing a program to teach students about the environment necessitated tracking, adopting, and at times accelerating the formation of the idea that term represented. Consequently, IEEP's history illuminates an iterative global process of defining and redefining – interpreting and reinterpreting – the concept of the environment, revealing not only tangible educational efforts to save the planet but an understanding of human beings' relationship to the natural world.

2. Establishing Environmental Education as an International Priority, 1946-1950

With the ratification of its constitution on November 4, 1946, UNESCO came into existence for the purpose of contributing to «peace and security by promoting collaboration among the nations through education, science and culture...»⁸. Given the organization's primary objective, it is not immediately clear why this particular

⁷ «Intergovernmental Conference on Environmental Education Organized by UNESCO with the Cooperation of UNEP, USSR, Tbilisi, 14-26 October 1977» UNESCO/ENVED, Paris, 5 September 1977, Paris: UNESCO, 8.

⁸ On UNESCO's history, see (Laves & Thomson, 1957); (Conil-Lacoste, 1994); (Valderrama, 1995); (Droit, 2005); (Dorn, 2006).

U.N. specialized agency should have concerned itself with the environment. As historian John McCormick notes, the word «conservation» appears in UNESCO's constitution only in reference to «books, works of art, and 'monuments' of history and science» (1989, p. 33). It does not refer to natural resources.

The reason is found in UNESCO member states' election of Julian Huxley as the organization's first director-general⁹. Huxley was a British evolutionary biologist, former secretary of the Zoological Society of London, and a member of the prominent Huxley Family. (His grandfather, Thomas Henry, was a zoologist, proponent of evolutionary theory, and friend of Charles Darwin's; his half-brother, Andrew Fielding, won the Nobel Prize in Physiology and Medicine; his younger brother, Aldous, was a celebrated writer). Huxley was also a devotee and popularizer of science as well as an «ecstatic nature lover» (Wöbse, 2011, p. 339)¹⁰. In addition to the many prestigious awards he received over the course of his career, including a knighthood, he supervised, narrated, and appeared in *The Animal Kingdom*, a series of six short films produced by Britain's Travel and Industrial Development Association, and wrote and directed the first wildlife film to receive an Academy Award (for Best Documentary One-Reel Short Subject), *The Private Life of the Gannets* (Bousé, 2000, p. 210; Mitman, 1999, pp. 76-69)¹¹.

Immediately following UNESCO's establishment, Huxley almost single-handedly brought natural resource conservation into the organization's purview when he submitted a program proposal to member states that included protecting landscapes of «natural beauty» (Wu, 2020, pp. 192-199; Boardman, 1981, p. 38). During the organization's second general conference, held in Mexico in 1947, Huxley further urged the incorporation of nature protection into UNESCO's portfolio of responsibilities. He later recalled representatives of member states questioning his rationale. «Delegates asked what seemed to me silly questions» he wrote in his memoir. «Why should UNESCO try to protect rhinoceroses or rare flowers? Was not the safeguarding of grand, unspoilt scenery outside its purview? etc., etc.» Huxley responded that «the enjoyment of nature was part of culture, and that the preservation of rare and interesting animals and plants was a scientific duty» (Huxley, 1973, pp. 50-51). His advocacy resulted in delegates adopting a conference resolution that included nature protection in UNESCO's brief¹². The resolution, however, appeared under the conference's Natural Sciences section and made no reference to education. For UNESCO, nature protection was, at the outset, a scientific enterprise rather than an educational one.

At the Mexico conference, Huxley also succeeded in convincing member states of the need for an international conference on resource conservation. Although UNESCO had previously agreed to provide organizational support to the United

⁹ For a statement of what Huxley believed should be UNESCO's «purpose and philosophy» see (Huxley, 1947).

¹⁰ On Huxley's life and career, see (Baker, 1978).

¹¹ On Huxley's self-described motivation for making the film, see (Huxley, 1970), 217-220.

¹² «Records of the General Conference of UNESCO, second session, Mexico, 1947, v. 2: Resolutions. Conference: UNESCO. General Conference, 2nd, Mexico City, 1947 [215], Document code: 2 C/Resolutions, 2 C/132 (II)» Paris: UNESCO, 1947, 29.

Nations Economic and Social Council (ECOSOC) in planning an United Nations Scientific Conference on the Conservation and Utilization of natural Resources (known by its acronym, UNSCCUR), Huxley and his staff believed ECOSOC maintained an overly utilitarian approach to resource scarcity and the international conflicts it enjoined (Wöbse, 2011, pp. 341-342). Indeed, ECOSOC approached the proper utilization of natural resources as an issue best addressed by «engineers, resource technicians, economists, and other experts in related fields» – and primarily as a factor in preventing international conflict (McCormick, 1989, p. 27). Alternatively, UNESCO defined nature protection and the conservation of natural resources as having social and cultural dimensions. In other words, according to historian Anna-Katharina Wöbse, UNESCO argued that «saving resources meant more than sharing ore and coal deposits» (2011, p. 343). Dissatisfied with a solely supporting role in what it anticipated would be a narrow technical conference, UNESCO set out to achieve two aims: influencing the UNSCCUR agenda and planning a more conceptually expansive conference on nature protection and resource conservation to be held concurrently with UNSCCUR at the U.N.'s temporary headquarters in Lake Success, New York. It achieved both.

Planning for two, simultaneous international conferences would most likely not have been possible for such a young intergovernmental body (even one as well-staffed as UNESCO) had Huxley not already used his office's authority to contribute to establishing an affiliated organization, the International Union for the Protection of Nature (IUPN; later renamed the International Union for the Conservation of Nature) at Fontainebleau, France, in 1948¹³. IUPN was a unique, hybrid, governmental/non-governmental organization (NGO) (McCormick, 1989, p. 35). Unlike UNESCO, which had a broadly stated (and somewhat ambiguous) mission, IUPN's strength was its focus on protecting and preserving wilderness and threatened habitats (Mitman, 1999, p. 192). It did so by serving as a meeting ground and facilitator for scientists and other experts and then advising governmental and international bodies. Its central weakness was that, as an organization subsidiary to UNESCO, it was not a United Nation's operational agency. As such, it relied heavily on UNESCO for financial support and on other U.N. agencies and NGOs for undertaking many of the projects it deemed crucial¹⁴. Even with its shortcomings, however, IUPN influenced the trajectory of international environmental awareness, especially in the field of education. From its inception, IUPN's programming included educating adults and children «to realize the danger which lies in the alteration of natural resources and the necessity of action against such danger» (Holdgate, 1999, p. 47). Over time and in collaboration with UNESCO, it successfully moved education from the margins of international deliberations regarding nature protection and resource conservation towards the center.

¹³ The IUPN's roots can be traced to the pre-war, Brussels-based International Office for the Protection of Nature. IUPN pioneered compiling information on species threatened with extinction in «red data books» which presently take the form of the IUCN Red List of Threatened Species as well as the Red List of Ecosystems. On the organization's history, see (Holdgate, 1999).

¹⁴ This weakness proved significant over time. The World Wildlife Fund was established in 1961 in part to provide IUPN more stable financial support.

UNESCO and IUPN carefully organized the Lake Success conferences so that their membranes were permeable. Meeting schedules, for instance, permitted participants to move easily between the two¹⁵. Consequently, UNSCCUR's over 500 delegates engaged a much wider range of issues than they would have otherwise. Primarily due to UNESCO's and IUPN's influence, «Education for Conservation» served as a topic of serious discussion at both meetings, with UNSCCUR dedicating a plenary session to it¹⁶. In anticipation of the conferences, UNESCO sponsored a multi-nation survey on «the state of education for the conservation and more efficient use of natural resources» and prepared a 115-page report on its results (Gille, 1949). Through the survey, IUPN queried countries and territories from all six continents on the education taking place in schools and universities, as a component of teacher training, as part of extra-curricular groups, organizations, and activities, and to adults through lectures, film, and exhibitions (Gille, 1949, pp. 4-5). The report's author, agronomist Alain Gille, who served as the first Secretary of IUPN's Education Commission as well as a UNESCO staff member, observed that the survey results provided conference delegates with important insights into existing efforts to educate for conservation (Gille, 1949, p. 4). Perhaps the first document of its kind, the report covered such varied topics as nature study, tree planting, fish hatcheries, soil conservation, school farms, science textbooks, and boys and girls 4-H Clubs.

Informed by such comprehensive resources, representatives of the 32 nations and 11 international organizations attending the concurrent UNESCO/IUPN conference on the protection of nature allotted significant time to the question of environmental education. According to conference secretary general Jean-Paul Harroy, the meeting program intentionally deviated from «the traditional practice of devoting most of the discussion at such gatherings to questions of perfecting conservation legislation and of managing reserve areas»¹⁷. Instead, Harroy observed, education was one of two overarching conference themes that «aroused lively interest» and «gave a new orientation to the idea of Nature Protection»¹⁸. The other was the promotion of the interdisciplinary study of nature known as «ecology»¹⁹. Both themes would make important contributions to defining UNESCO's long-term goals for environmental education.

¹⁵ «Proceedings of the United Nations Scientific Conference on the Conservation and Utilization of Resources, 17 August-6 September, 1949, Lake Success, New York. Volume 1, Plenary Meetings» United Nations Department of Economic Affairs: Lake Success, 1950, x.

¹⁶ «Proceedings of the United Nations Scientific Conference on the Conservation and Utilization of Resources, 17 August-6 September, 1949, Lake Success, New York. Volume 1, Plenary Meetings» United Nations Department of Economic Affairs: Lake Success, 1950, 255-306.

¹⁷ «International Technical Conference on the Protection of Nature, Lake Success, August 22-29, 1949, Conference Proceedings and Papers, edited by the Secretariat of the International Union for the Protection of Nature» Paris: UNESO, 1950, vii.

¹⁸ «International Technical Conference on the Protection of Nature, Lake Success, August 22-29, 1949, Conference Proceedings and Papers, edited by the Secretariat of the International Union for the Protection of Nature» Paris: UNESO, 1950, ix.

¹⁹ On the development of the concept of ecology, see (McIntosh, 1986); (Bramwell, 1989). Also see (Worster, 1994).

Although the environment was not explicitly identified as an area of responsibility in UNESCO's constitution, the organization quickly adopted it as a central concern following its founding. As Aaron Wu observes, this move, combined with Julian Huxley's leadership in establishing IUPN, led UNESCO to become «the first post-war international institution to dedicate activities specifically to the protection of nature» (2020, p. 196). At UNSCCUR – a conference historian John McCormick has characterized as the first major milestone in the rise of the global environmental movement – UNESCO compelled the United Nations to conceive of environmental issues as having political, social, and cultural dimensions in addition to the economic ones that specialized agencies such as the World Bank already recognized (1989, p. 37). By 1950, then, UNESCO had distinguished itself as a proactive, intergovernmental body concerned with the state of the natural world and begun to shift the international dialogue regarding the environment towards one that reflected an ecological conception. These achievements were short-lived, however, as UNESCO was soon «taken hostage by the Cold War» (Wöbse, 2011, p. 348)²⁰. Political rivalries between the United States, the Soviet Union, and their respective allies complicated and delayed, if not derailed, many of the organization's most basic education projects (Dorn & Ghodsee, 2012). Although UNESCO, primarily through IUPN, remained attentive to issues concerning environmental education by producing curricular materials and offering guidance to nations seeking to improve teacher training, almost two decades would pass before the organization reassumed leadership in the field (Boardman, 1981, p. 45; Holdgate, 1999, pp. 50-51).

3. Creating the International Environmental Education Program, 1968-1975

In September 1968, at its Paris headquarters, UNESCO hosted the Intergovernmental Conference of Experts on the Scientific Basis for Rational Use and Conservation of the Resources of the Biosphere – also known as the Biosphere Conference (Valderrama, 1995, p. 179). Designed primarily as a meeting of experts with the goal of scientific exchange, the Conference nevertheless had a clearly stated secondary purpose: to create «among scientists, political leaders and within the general public a current of 'ecological thinking,' calculated to promote a better understanding of the relations between man and nature as part of the broader question of the relation between man and his environment»²¹. Foreshadowed by the Lake Success conferences almost twenty years earlier, the «ecological turn» the Biosphere Conference signaled – away from the more limited goals of nature protection and resource conservation towards a comprehensive scientific understanding of factors influencing the environment – had been developing among scientists for over a decade (Warde *et al.*, 2018; Meyer, 2017)²². By 1968, a global

²⁰ Also see (Schleper, 2019, p. 43).

²¹ *Use and Conservation of the Biosphere*, «Proceedings of the intergovernmental conference of experts on the scientific basis for rational use and conservation of the resources of the biosphere, Paris, 4-13 September 1968» Paris: UNESCO, 1970, 238.

²² Simone Schleper traces the institutionalization of this turn to ecology at the IUPN to the

environmental revolution – the beginning of which is often marked in the United States with the 1962 publication of Rachel Carson's *Silent Spring* – led many to conclude that «saving the environment» meant addressing the ecology of the natural world as well as the political, economic, social, and cultural domains comprising the biosphere – what would become known as the «human» or «total» environment²³.

The Biosphere Conference's emphasis on ecology was pivotal for education, with a full quarter of the recommendations produced by delegates referencing the need for an interdisciplinary, wholistic study of the environment²⁴. The meeting contributed notably to the conceptual foundations of the United Nations Conference on the Human Environment held four years later in Stockholm, Sweden (preparation for which began while the Biosphere Conference was still in session)²⁵. Stockholm has been described as «the prototype» for major world conferences that serve as «global town meetings» (Soroos, 2005, p. 24). Yet this landmark gathering in the history of the international environmental movement differed from many United Nations conferences in one important respect. While employing forceful rhetoric, delegates also inaugurated a series of measures that, according to political scientist Lynton Caldwell, «translated published resolutions into actual accomplishments» (1984, p. 51)²⁶.

The Stockholm Conference produced a Declaration on the Human Environment, a List of Principles, and an Action Plan consisting of 109 recommendations. Recommendation 96 proposed establishing an international program in environmental education «interdisciplinary in approach, in school and out of school, encompassing all levels of education and directed towards the general public, in particular the ordinary citizen living in rural and urban areas, youth and adult alike, with a view to educating him as to the simple steps he might take, within his means, to manage and control his environment»²⁷. Given UNESCO's existing orientation towards environmental education, an internal report characterized Recommendation 96 as having «relatively minor implications» for the organization. «Considered as a whole» it noted, «Unesco's programme in educational training in relation to the environment embraces the kinds of activities recommended by the United Nations Conference

establishment of a Commission on Ecology in 1954. (Schleper, 2019), 32.

²³ UNESCO, for instance, dedicated the January 1969 issue of *The Courier* to the question «Can we keep our planet habitable?» Emphasizing the concept of the biosphere in responding to the question, American biologist René Dubos observed in the issue, «The Biosphere is a new word which every thinking individual today ought to make part of his vocabulary» (Dubos, 1969), 7.

²⁴ «Final Report, Intergovernmental conference of experts on the scientific basis for rational use and conservation of the resources of the biosphere, Paris, 4-13 September 1968» Paris: UNESCO, 1969, 21-28.

²⁵ See, for instance, (Rowland, 1973); (Stone, 1973); (McCormick, 1989), Chapter Five; (Caldwell, 1996), Chapter Four. For a list of international environmental education conferences and workshops held during the years between the Biosphere and Stockholm conferences, see (Pace, 1996), 3.

²⁶ On the intersection of science and politics at Stockholm, see (Javaudin, 2017)

²⁷ UNESCO General Conference, Seventeenth Session, Report on the Work of the United Nations Conference on the Human Environment and its Implications for UNESCO, Paris, 1972, 9-10.

on the Human Environment»²⁸. The one exception was «the opportunity and the obligation to serve a catalytic role in the development and execution of the kind of co-operative, interagency 'international programme in environmental education' envisaged by the recommendation»²⁹.

Rather than founding a new specialized agency dedicated to the environment that would assume responsibility for implementing the Stockholm Conference recommendations, the U.N. General Assembly created a program, headquartered in Nairobi, Kenya, to coordinate intergovernmental environmental projects. The United Nations Environment Program (UNEP) divided its work into three categories: assessment, management, and supporting measures³⁰. Assessment involved researching, monitoring, and evaluating the state of the global environment (efforts that became known programmatically as «Earthwatch»). Management comprised collaborating with U.N. offices and NGOs to develop international conventions for environmental protection. Supporting measures included assisting specialized agencies in their efforts to implement Stockholm recommendations. Accordingly, in January 1975, UNEP partnered with UNESCO to establish the International Environmental Education Program (IEEP) as a three-year project with the following goals:

- Facilitate the *co-ordination, joint planning and pre-programming* activities essential to the development of an international programme in environmental education.
- Promote the international *exchange of ideas and information* pertaining to environmental education.
- Co-ordinate *research* to understand better the various phenomena involved in teaching and learning.
- Formulate and assess *new methods, materials and programmes* (both in-school and out-of-school, youth and adult) in environmental education.
- *Train and re-train personnel* adequately to staff environmental education programmes.
- Provide *advisory services* to Member States relating to environmental education (Stapp, 1975, p. 331).

IEEP's first director was William Stapp. As an American biologist on the faculty of the University of Michigan, Stapp was interested in environmental education at the elementary and secondary as well as collegiate levels (Gough, 2001, pp. 19-20). As President of the Nature Study Society and a proponent of teaching for student understanding of the total environment, his conception of environmental education extended beyond the curriculum to pedagogical methods³¹. In the tradition of John

²⁸ UNESCO General Conference, Seventeenth Session, Report on the Work of the United Nations Conference on the Human Environment and its Implications for UNESCO, Paris, 1972, 10.

²⁹ UNESCO General Conference, Seventeenth Session, Report on the Work of the United Nations Conference on the Human Environment and its Implications for UNESCO, Paris, 1972, 11.

³⁰ On the history of UNEP, see (McCormick, 1989), Chapter Six.

³¹ On Stapp's model for K-12 environmental education, see (Swann & Stapp, 1974), especially

Dewey's model of Progressive Education, Stapp argued for an education that was problem-based and anchored in community needs. And, like Dewey, he sought to educate for constructive citizenship. Environmental problems were certainly «legitimate concerns» of government officials, Stapp observed, yet the «responsibility for their solution rests, to a large extent, with citizens» (1969, p. 30). Writing in 1969, in the first issue of the newly established *Journal of Environmental Education*, he claimed, «Most current programs in conservation education are oriented primarily to basic resources; they do not focus on community environment and its associated problems. Furthermore, few programs emphasize the role of the citizen in working, both individually and collectively, toward the solution of problems that affect our well being. There is a vital need for an educational approach that effectively educates man regarding his relationship to the total environment» (Stapp, 1969, p. 30). Over the next two decades, Stapp's conception of environmental education as civic education permeated IEEP projects.

Stapp and his staff quickly set out to develop a strategic plan for accomplishing IEEP's goals (Stapp, 1975, pp. 331-332). First, and in anticipation of an International Environmental Education Workshop to be held later that year in Belgrade, Yugoslavia, IEEP would survey UNESCO's 136 member states on current forms of environmental education being used in their nations. Seeking to compile as comprehensive an inventory as possible, IEEP consultants would travel to 83 countries to provide support in completing the surveys and to conduct inventories. The results would inform the writing of a «Working International Bibliography on Trends in Environmental Education» which Stapp would provide as source material to the authors of fourteen papers that would examine aspects of existing environmental education programs as well as forecast future needs. Distributed in advance to Belgrade participants, the papers would serve as the focus of the Workshop's various sessions³².

Second, Belgrade Workshop participants would formulate «guidelines and recommendations for the over-all, co-operative international programme of action for global environmental education» (Stapp, 1975, p. 333). Based on workshop discussions, IEEP would also revise the trend papers which, when combined with Belgrade guidelines and recommendations, would direct the development of regional seminars and pilot projects. «Tested and refined» the guidelines, recommendations, and trend papers would then serve as working documents for a world conference that IEEP would host in Tbilisi, Georgian S.S.R., for the purpose of developing intergovernmental policies on environmental education (Stapp, 1975, p. 333). Finally, member states would, based on conference recommendations, implement environmental education projects in schools at the primary, secondary, and tertiary levels and in out-of-school youth and adult programs. Integrated with these projects would be parallel programs for teacher training³³.

Chapter Four.

³² «The UNESCO-UNEP Environmental Education Programme» ED-75/WS/95, Paris: UNESCO, 1975, 1-2. For paper titles and authors, see *Connect: UNESCO-UNEP Environmental Education Newsletter*, 1, No. 1, January 1976, Paris: UNESCO, 4.

³³ «The UNESCO-UNEP Environmental Education Programme» ED-75/WS/95, Paris: UNESCO, 1975, 2-3.

Scholars have justifiably directed their attention to the United Nations conference at Stockholm as a landmark gathering in developing a global awareness of environmental issues. Just as often, however, they have overlooked the influence of UNESCO's 1968 Biosphere Conference in catalyzing an ecological understanding of the natural world while advancing a conception of the biosphere as comprised of political, economic, social, and cultural domains. One outcome of the influence of the Biosphere Conference on Stockholm, Recommendation 96 provided UNESCO and UNEP an opportunity to establish an international education program that would foster an environmental ethic. Through an interdisciplinary study of the ecology of the total environment characterized by a problems-based approach to curriculum and pedagogy, IEEP proposed educating students across the globe – both in schools and outside of them – to act as responsible citizens and stewards of the environment. Before that could happen, however, the world would have to agree to make it so.

4. The Belgrade Workshop and the Tbilisi Conference, 1975-1978

In October 1975, 96 representatives from some 60 countries and territories participated in the Belgrade Workshop on Environmental Education. IEEP's first intergovernmental gathering dedicated to addressing all aspects of environmental education, the meeting covered a range of topics, including instructional resources, teaching methods, program development, learning environments, and evaluation³⁴. The most important outcome of the Workshop, however, was the issuing of the Belgrade Charter – a unanimously adopted proclamation that went far beyond Recommendation 96 of the Stockholm Conference in calling for dramatic action to be taken in the field of environmental education.

Prior to the 1972 Stockholm Conference, tensions over environmental issues between economically developing nations located primarily in the southern hemisphere and industrialized nations mostly in the north began to escalate, with the former fearing that the latter would try to use environmental regulations to limit their economic growth (Soroos, 2005, p. 25). Developing nations therefore insisted that environmental problems resulting from poverty and population growth – such as deforestation and soil erosion – be prioritized in any international program of environmental protection. This North-South divide remained mostly subdued during the Stockholm Conference because of intensive planning and a crucial preparatory meeting held in Founex, Switzerland, in June 1971³⁵. By 1974, however, developing nations had formed an influential bloc, leading to the adoption by the U.N. General Assembly of the Declaration on the Establishment of a New International Economic Order (NIEO)³⁶. As international law scholar Karin Mickelson describes, few of the proposals comprising the Declaration were new; developing nations had sought

³⁴ For a comprehensive list of meeting topics, see *Connect: UNESCO-UNEP Environmental Education Newsletter*, 1, No. 1, January 1976, Paris: UNESCO, 4.

³⁵ On the history of the Founex meeting, see (Manulak, 2017).

³⁶ United Nations General Assembly, Declaration on the Establishment of a New International Economic Order; Adopted at the 2229th plenary meeting, 1 May 1974. In: Resolutions adopted by the General Assembly during its 6th special session, 9 April-2 May, 1974. A/9559, 1974, pp. 3-5 (GAOR, 6th special sess., Suppl. no. 1).

changes in the international system for years. Nevertheless, the southern bloc of nations demanded a more equitable distribution of industrial production, restructured international markets, and new international governance structures (among other proposals) that would shift the benefits of the international order away from the north (Mickelson, 2015, p. 118).

According to Mickelson, 1973 to 1975 represented the peak years of «Southern optimism» towards modifying the international economic order (2015, p. 118). Coinciding with the Belgrade Workshop, it is hardly surprising that the Belgrade Charter referenced the NIEO and its call for a «new concept of development». «It is absolutely vital» the Charter declared, «that the world's citizens insist upon measures that will support the kind of economic growth which will not have harmful repercussions on people; that will not in any way diminish their environment and their living conditions». It continued:

We need nothing short of a new global ethic – an ethic which espouses attitudes and behaviours for individuals and societies which are consonant with humanity's place within in the biosphere; which recognizes and sensitively responds to the complex and ever-changing relationships between humanity and nature and between people. Significant changes must occur in all of the world's nations to assure the kind of rational development which will be guided by this new global ideal – changes which will be directed towards an equitable distribution of the world's resources and more fairly satisfy the needs of all peoples³⁷.

The implications of such a proclamation were profound, with workshop participants asserting the primacy of education's role in bringing about this new global ethic. As the Charter explicitly stated, «The reform of educational processes and systems is central to the building of this new development ethic and world economic order. Governments and policymakers can order changes, and new development approaches can begin to improve the world's condition – but all of these are no more than short-term solutions, unless the youth of the world receives a new kind of education»³⁸. The Charter then described the overarching objectives, audiences, and guiding principles of this new kind of education, including: «environmental education should consider the environment in its totality, natural and man-made, ecological, political, economic, technological, social, legislative, cultural and esthetic;» «environmental education should be interdisciplinary in its approach;» «environmental education should emphasize active participation in preventing and solving environmental problems»³⁹.

³⁷ «The Belgrade Charter: A Framework for Environmental Education, 22 October 1975» Paris: UNESCO, 1.

³⁸ «The Belgrade Charter: A Framework for Environmental Education, 22 October 1975» Paris: UNESCO, 2.

³⁹ «The Belgrade Charter: A Framework for Environmental Education, 22 October 1975» Paris: UNESCO, 4.

IEEP dedicated the first issue of its newsletter, *Connect*, to the Belgrade Workshop and distributed it to thousands of recipients around the world⁴⁰. As planned, it notified member states of follow-up meetings to be held in the regions of Africa, the Arab States, Asia, Europe, Latin America, and North America for the purpose of discussing the Charter and the over 100 recommendations resulting from the meeting⁴¹. It also informed the states of available funding for pilot projects and invited representatives to propose regional workshops for developing environmental education curricula and teaching methods⁴².

A few months later, a three-week, four-nation Latin American regional workshop held in Peru produced a plan for an environmental project that IEEP characterized as emblematic of the «new kind of education» propounded by the Belgrade Charter. Educators from Cuba, Panama, Peru, and Venezuela designed a one-year, experimental program «integrating teachers, students, government officials, and community representatives into the life, learning and environmental problems of the community»⁴³. They designed the project to engage secondary school students in examining existing environmental problems in their communities, including air and water quality, solid waste disposal, soil erosion, transportation and pollution. Working collaboratively, students and teachers would organize and analyze information pertaining to the problems. They would conduct interviews and field studies, develop and evaluate solutions, propose action plans, and implement a solution. With a stated goal of putting the school «at the service of the community» the project was described as connecting the school curriculum to the community's needs while also raising awareness among students and generating the knowledge, skills, and abilities necessary to effectively address environmental problems. Reporting on the Workshop, *Connect* urged member states to consider both it and the resulting pilot project as models for future collaborations. «It may be» the publication read, «the prototype for school-community integration in many parts of the world»⁴⁴.

As significant as was the Belgrade Workshop, it was an international «workshop» that generated ideas and proposals rather than a conference that had the authority to produce intergovernmental agreements. Consequently, the framework for environmental education it produced was open to significant revision both prior to and during the world conference IEEP organized in Tbilisi two years

⁴⁰ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 1, No. 1, January 1976, Paris: UNESCO.

⁴¹ For a chronological report on these meetings and their outcomes, see *Connect: UNESCO-UNEP Environmental Education Newsletter*, 2, No. 1, March 1977, Paris: UNESCO, 1-8.

⁴² *Connect: UNESCO-UNEP Environmental Education Newsletter*, 1, No. 2, April 1976, Paris: UNESCO, 2. IEEP supported 18 pilot projects at this stage of its development. For a list with brief descriptions of each project, see «Intergovernmental Conference on Environmental Education Organized by UNESCO with the Cooperation of UNEP, USSR, Tbilisi, 14-26 October 1977» UNESCO/ENVED, Paris, 5 September 1977, 10-15.

⁴³ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 1, No. 3, September 1976, Paris: UNESCO, 1.

⁴⁴ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 1, No. 3, September 1976, Paris: UNESCO, 1-2.

later⁴⁵. Rather than weakening the Belgrade Charter, however, the 265 delegates and 65 representatives and observers attending the world's first intergovernmental conference on environmental education reasserted and even expanded upon it⁴⁶. «Environmental education, properly understood» the Tbilisi Declaration proclaimed:

should prepare the individual for life through an understanding of the major problems of the contemporary world, and the provision of skills and attributes needed to play a productive role towards improving life and protecting the environment with due regard given to ethical values. By adopting a holistic approach, rooted in a broad interdisciplinary base, it recreates an overall perspective which acknowledges the fact that natural environment and man-made environment are profoundly interdependent. It helps reveal the enduring continuity which links the acts of today to the consequences for tomorrow. It demonstrates the interdependencies among national communities and the need for solidarity among all mankind⁴⁷.

In addition to issuing such sweeping statements, delegates formalized many of the features comprising environmental education that had been evolving since UNESCO's Biosphere Conference almost a decade earlier. One, for instance, emphasized the total environment: «A basic aim of environmental education is to succeed in making individuals and communities understand the complex nature of the natural and the built environments resulting from the interaction of their biological, physical, social, economic, and cultural aspects...»⁴⁸. Another confirmed the need for a problem-solving approach: «Environmental education should bring about a closer link between educational processes and real life, building its activities around the environmental problems that are faced by particular communities and focusing analysis on these by means of an interdisciplinary, comprehensive approach...»⁴⁹. Yet another highlighted environmental education's role in developing «a sense of responsibility and solidarity» among countries and regions «as the foundation for a new international order which will guarantee the conservation and improvement of the environment»⁵⁰.

⁴⁵ On IEEP preparations for the Tbilisi Conference, see *Connect: UNESCO-UNEP Environmental Education Newsletter*, 2, No. 2, July 1977, Paris: UNESCO, 1-4.

⁴⁶ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 3, No. 1, January 1978, Paris: UNESCO, 1.

⁴⁷ «Final Report, Intergovernmental Conference on Environmental Education organized by Unesco in co-operation with UNEP, Tbilisi (USSR), 14-26 October 1977» ED/MD/49, Paris: UNESCO, 1978, 24.

⁴⁸ «Final Report, Intergovernmental Conference on Environmental Education organized by Unesco in co-operation with UNEP, Tbilisi (USSR), 14-26 October 1977» ED/MD/49, Paris: UNESCO, 1978, 25.

⁴⁹ «Final Report, Intergovernmental Conference on Environmental Education organized by Unesco in co-operation with UNEP, Tbilisi (USSR), 14-26 October 1977» ED/MD/49, Paris: UNESCO, 1978, 25-26.

⁵⁰ «Final Report, Intergovernmental Conference on Environmental Education organized by Unesco in co-operation with UNEP, Tbilisi (USSR), 14-26 October 1977» ED/MD/49, Paris:

Finally, conference participants used recommendations to generate what amounted to an «action plan» for developing environmental education at the national and international levels, providing IEEP with an agenda it would pursue over the next decade⁵¹. It included: identifying major environmental problems; encouraging action in teaching young children about the environment «within the family and in associations concerned with pre-primary education»; assigning elementary and secondary schools «a central role» in addressing environmental problems; expanding environmental studies in higher education; establishing «the means and methods for an in-service training policy» for educators of all age groups; seeking «to gradually transform attitudes and behavior» of all community members towards the environment; and contributing «to the search for a new ethic based on respect for nature, for people and for their dignity, and for the future...»⁵².

Participants in the Belgrade Workshop on Environmental Education declared the need for «nothing short of a new global ethic» concerning the natural world, one that would be fostered by a «new kind of education». By affirming the Belgrade Charter, the Tbilisi Conference gave IEEP the international imprimatur necessary to promote an environmental education oriented around the total environment and infused with an ethical responsibility for the natural world. It prioritized investigating local environmental problems as well as involving students in developing and implementing solutions to those problems. It was concerned with forms of equity in economic development and promoted learning both in schools and outside of them. The result of over a decade of meetings, survey results, conferences, workshops, and dialogue among experts from across the globe, Tbilisi's formulation became the standard for environmental education. In this regard, the Tbilisi Conference was, as UNESCO's Director-General Amadou-Mahtar M'Bow observed, «both a milestone and a starting point»⁵³.

5. Post-Tbilisi Mania and Challenges, 1978-1995

One scholar has described the months immediately following the Tbilisi Conference as a «post-Tbilisi mania» of environmental education activity (Pace, 1996, p. 14). It included a «National Leadership Conference on Environmental Education» held in Washington, D.C., the approval of an environmental education plan by the U.S.S.R. State Committee for Science and Technology, a national seminar held in London entitled «Response to the Challenge of Tbilisi», another national seminar, this one held in Warsaw, entitled «University, Environment, and Society», a third seminar, held in Dakar, on the development of instructional materials for the environmental

UNESCO, 1978, 25.

⁵¹ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 3, No. 1, January 1978, Paris: UNESCO, 8.

⁵² «Final Report, Intergovernmental Conference on Environmental Education organized by Unesco in co-operation with UNEP, Tbilisi (USSR), 14-26 October 1977» ED/MD/49, Paris: UNESCO, 1978, 28.

⁵³ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 3, No. 1, January 1978, Paris: UNESCO, 8.

education of adults in West Africa, a «Workshop on Environmental Education and Training in African Universities» held in Nairobi, and a national conference on implementing the Tbilisi recommendations held in the Krkonoše National Park of the Czechoslovak Socialist Republic⁵⁴. In addition, regional and sub-regional workshops held to craft strategic plans for implementing Tbilisi Conference recommendations occurred in Senegal for Africa⁵⁵, Costa Rica for Latin America⁵⁶, Antigua for the Caribbean⁵⁷, Thailand for Asia and Oceania⁵⁸, the Czechoslovak Socialist Republic and Federal Republic of Germany for Europe⁵⁹, and Bahrain for the Arab States⁶⁰.

In parallel to these many gatherings, over thirty national workshops were held to train pre-service and in-service teachers in the latest educational content, methods, and materials relating to the environment⁶¹. Simultaneously, nations pursued dozens of pilot projects that the Tbilisi Conference either catalyzed or inspired. In Ghana, for instance, the Science Education Programme for Africa launched a project to develop multimedia materials on environmental education for use by primary school teachers. Jordan's Ministry of Education sponsored the development of a project on water pollution and purification in the Ghore area of the Jordan Valley. Mongolia's State Committee of the Board of Ministers for Science and Technology sponsored a project designed to develop audio-visual aids for instructing adults on conserving natural resources. The Science Center of Kabul, with the support of Afghanistan's Ministry of Education, designed and implemented learning modules for primary schools on sanitation and soil and water conservation. In Columbia, the Ministry of Education partnered with that nation's Institute for the Development of Renewable Natural Resources to develop educational materials pertaining to «environmental problems of the country's coffee ecosystems»⁶².

For six years, beginning with the publication of the first issue of *Connect*, UNESCO and UNEP offered a mostly positive account of many of these efforts. In the fall of 1982, however, the newsletter reported on a series of significant

⁵⁴ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 3, No. 3, September 1978, Paris: UNESCO, 4-8; *Connect: UNESCO-UNEP Environmental Education Newsletter*, 3, No. 4, December 1978, Paris: UNESCO, 5-6. Also see (Pace, 1996), 12.

⁵⁵ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 4, No. 1, March 1979, Paris: UNESCO, 1-4.

⁵⁶ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 5, No. 1, March 1980, Paris: UNESCO, 1-3.

⁵⁷ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 5, No. 3, September 1980, Paris: UNESCO, 1-3.

⁵⁸ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 5, No. 4, December 1980, Paris: UNESCO, 3-5.

⁵⁹ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 5, No. 1, March 1981, Paris: UNESCO, 1-2.

⁶⁰ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 6, No. 3, September 1981, Paris: UNESCO, 3.

⁶¹ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 6, No. 4, December 1981, Paris: UNESCO, 1-7.

⁶² *Connect: UNESCO-UNEP Environmental Education Newsletter*, 6, No. 2, June 1981, Paris: UNESCO, 1-4.

challenges to achieving the goals set forth at the Tbilisi Conference⁶³. A decade had passed since the United Nations held its Conference on the Human Environment in Stockholm, providing an appropriate moment for UNESCO and UNEP to assess «progress, trends, and prospects» in the development of environmental education. Gathering experts from 28 member states and governmental and non-governmental organizations, UNESCO and UNEP asked participants to consider how successful IEEP had been in achieving the goals articulated at Tbilisi five years earlier.

Those attending the meeting began by crediting IEEP with raising «awareness of the environment and its problems» and by identifying multiple instances of nations adopting legislative provisions requiring the inclusion of environmental education in formal schooling⁶⁴. They recognized pilot projects as stimulating innovations in curriculum and teaching methods and praised various forms of international exchange and cooperation that IEEP facilitated through workshops, trainings, conferences, and surveys. They also, however, noted challenges to program success revolving around a common theme: how to effectively alter the instructional content and practices of educators in local contexts. Incorporating interdisciplinarity into teaching and learning about the environment provided one example. Most instructors, whether in-school or out-of-school, had not received an interdisciplinary education (not to mention one centered on the environment), limiting their capacity to teach in that context and restricting their ability to train others to do so. Easily accessible curricular materials, moreover, were not written in an interdisciplinary fashion and most schools and universities were not organized institutionally to support interdisciplinary teaching or research. «Apart from the fact that teachers are insufficiently aware of the importance of interdisciplinary work» meeting participants observed, «suitable educational materials or resources are lacking, there are institutional difficulties connected with the organization of school timetables or, again, arguments between teachers about their respective fields of competence»⁶⁵.

Participants also noted the effects of political and economic contexts in influencing progress. National policies regarding environmental education carried less authority in nations with less centralized political systems, for instance, while socio-economic conditions in local communities frequently dictated opportunities for teacher professional development⁶⁶. They asserted, «In-service training poses numerous problems — problems of a temporal nature (what is the best time to organize it: in school time or during the holidays?) and problems of a financial nature — for some countries consider that it would be very costly to provide lengthy in-service training... Moreover, those [teachers] taking the courses do not appear to

⁶³ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO.

⁶⁴ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO, 1.

⁶⁵ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO, 4.

⁶⁶ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO, 2.

be highly motivated when it constitutes unpaid work in their eyes»⁶⁷. According to meeting participants, many of these challenges were exacerbated in out-of-school contexts, which were often less subject to state regulation. «Generally speaking» they observed, «the personnel engaged in out-of-school educational activities (industrial and agricultural instructors, adult educators, communication specialists, etc.) receive little training in environmental matters, and the institutions responsible for their training have no concerted policy on the matter»⁶⁸.

The form of environmental education embraced at the Tbilisi Conference espoused encouraging students, young and old, «to adopt values and attitudes favourable to the conservation and improvement of the environment, and to direct their intellectual and practical efforts towards the search for solutions to environmental problems, towards decision-making and action»⁶⁹. Yet as meeting participants noted, teaching students what to value or how to feel about a subject involved a qualitatively different form of education than that involved in transmitting knowledge. This distinction, they claimed, had not been thoroughly considered as it applied to environmental education. «On the one hand» they noted, «approaching affective questions explicitly during educational processes in some communities comes up against resistance from teachers, pupils, or parents; on the other hand, most of the experiments and practical applications in this field have been carried out in industrialized countries, which makes their transfer to other cultural and environmental situations difficult». «The fact is» they concluded, «if pedagogical tools are to be developed which can be used in discussing values, in practical and varied teaching and learning situations, they must be tried out and adapted to the special conditions of societies»⁷⁰.

The challenges revealed at the 1982 UNESCO-UNEP meeting continued to test IEEP over time. In 1985, when the Program marked its tenth anniversary, and again in 1987, at the UNESCO-UNEP International Congress on Environmental Education and Training held in Moscow (also known as Tbilisi Plus Ten), member states highlighted similar difficulties in achieving Tbilisi Conference goals. The action plan resulting from the 1987 Moscow Conference, for instance, entitled «International Strategy for Action in the field of Environmental Education and Training for the 1990s», noted that the goals of environmental education «cannot be defined without taking account of the economic, social and ecological realities of each society». In many nations, it continued, «the shortage of available financial resources made it essential to «define clear and realistic aims» in developing environmental education curricula and teaching methods and that «persistent difficulties of a conceptual and structural nature within educational systems» prevented environmental education from being

⁶⁷ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO, 5.

⁶⁸ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO, 5.

⁶⁹ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO, 6.

⁷⁰ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 7, No. 3, September 1982, Paris: UNESCO, 6.

implemented «in truly interdisciplinary ways»⁷¹. Still, UNESCO and UNEP maintained Tbilisi Conference goals as the standard to which environmental education programs should aspire. In 1992, when the United Nations held its Conference on Environment and Development in Rio de Janeiro (also known as the «Earth Summit»), member states reiterated their commitment to environmental education as articulated at Tbilisi, noting in the Rio Final Report that the Tbilisi gathering provided the «fundamental principles» for Rio proposals relating to education, public awareness, and training⁷².

While IEEP grappled with challenges to successfully achieving its goals, organizations such as the IUPN (by then renamed the International Union for the Conservation of Nature; IUCN) and the World Wildlife Fund (WWF), along with UNEP, began to frame discussions about the environment around themes of poverty and inequality (Macekura, 2017, p. 249). This transition reflected, to some degree, the success of the southern bloc of economically developing nations in influencing international governmental and non-governmental organizations to conceptualize conservation as being in partnership with economic development rather than at odds with it. As with the field of environmental education, however, it had become increasingly clear to these organizations' leaders that a global strategy of conservation would not succeed without the engagement and cooperation of all nations, both north and south. Subsequently, the WWF, IUCN, and UNEP, according to Stephen Macekura, agreed to support «a group project» for the purpose of establishing general strategies that countries around the world could adopt «in order to pursue economic development within an ecologically sound framework» (Macekura, 2017, p. 251).

The project resulted in a report published in March 1980, the World Conservation Strategy, which one official characterized as achieving a «consensus between the practitioners of conservation and development» (quoted in Macekura, 2017, p. 253)⁷³. Undoubtedly, the report's most important contribution was in describing a process through which the basic needs of a population could be met «without destroying the resource base on which development depended» (Macekura, 2017, p. 253). Labeled «sustainable development» this idea was swiftly adopted by experts as central to the future of global environmental conservation⁷⁴. The World Bank began using the term by the mid-1980s, for instance, and it first appeared in *Connect* in December 1984 (in reference to the U.N. General Assembly's dedication of 1985 as International Youth Year)⁷⁵. The following September, IEEP announced that sustainable development

⁷¹ «International Strategy for Action in the field of Environmental Education and Training for the 1990s» UNESCO-UNEP International Congress on Environmental Education and Training, Moscow, 1987, Paris: UNESCO, 6, 9-10.

⁷² United Nations. «Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June, 1992» Agenda 21, Chapter 36, <https://www.un.org/esa/documents/ga/conf151/aconf15126-3.htm>

⁷³ Also see (McCormick, 1989), 162-170.

⁷⁴ On the development of the concept of sustainable development, see (Macekura, 2015); (Lele, 1991); (Warde, 2011); (Robinson, 2004).

⁷⁵ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 9, No. 4, December 1984, Paris: UNESCO, 4.

would be one of several on-going discussion topics at regional conferences and workshops⁷⁶.

Over the next two years, UNESCO and UNEP increasingly situated sustainable development as a fundamental element of environmental education. «One of the principal purposes and goals of environmental education (EE)» reported *Connect* in March 1987, «is to develop succeeding generations of people, both as producers and consumers of the world's wealth, in the rational use of natural resources. Ten years of experience since the Intergovernmental EE Conference at Tbilisi (USSR) in 1977 has confirmed the crucial role of education in the face of this vital contemporary challenge, which in turn is a major factor in environmentally sound, sustainable development»⁷⁷. Just months later, at the same Tbilisi Plus Ten conference where member states highlighted difficulties in achieving Tbilisi Conference goals, sustainable development was the subject of one of five conference symposia. The action plan resulting from the conference identified sustainable development as a focus of environmental education no fewer than eleven times⁷⁸.

The release, in that same year, of the final report of the U.N. World Commission on Environment and Development (also known as the Brundtland Commission after its chair, Norwegian Prime Minister Gro Harlem Brundtland) established sustainable development as a goal that the U.N.'s many agencies and programs could jointly pursue (Conca, 2015, pp. 38-39). The report, entitled «Our Common Future», defined the concept as «development that meets the needs of the present without compromising the ability of future generations to meet their own needs» (World Commission on Environment and Development, 1987, p. 43). Many nations, including the United States, endorsed the definition, leading the U.N. General Assembly to pass a resolution in December 1987 adopting sustainable development as a «central guiding principle of the UN, governments and private institutions, organizations and enterprises»⁷⁹. With the concept of sustainable development setting the terms for future deliberations regarding the global environment, UNESCO and UNEP formally adopted it as the primary focus of international environmental education⁸⁰.

⁷⁶ See, for instance, *Connect: UNESCO-UNEP Environmental Education Newsletter*, 10, No. 3, September 1985, Paris: UNESCO, 2, 4-5.

⁷⁷ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 12, No. 1, March 1987, Paris: UNESCO, 1.

⁷⁸ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 12, No. 3, September 1987, Paris: UNESCO, 1; «International Strategy for Action in the field of Environmental Education and Training for the 1990s» UNESCO-UNEP International Congress on Environmental Education and Training, Moscow, 1987, Paris: UNESCO, 4, 6, 11, 14, 17-19.

⁷⁹ United Nations. «Report of the World Commission on Environment and Development» Resolution 42/87 adopted by the General Assembly, 9th Plenary Meeting, 11 December 1987, <https://undocs.org/pdf?symbol=en/A/RES/42/187>

⁸⁰ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 13, No. 2, June 1988, Paris: UNESCO, 1-3.

6. Conclusion

In his opening address to the 1977 Tbilisi Conference, UNESCO Director-General Amadou-Mahtar M'Bow observed that the organization had «very early» been concerned with the environment but that «the concept of the environment had evolved»⁸¹. Indeed it had. As Paul Warde, Libby Robin and Sverker Sörlin write in their recent intellectual history of the environment, prior to World War II humanity lacked «a way of imagining the web of interconnection and consequence of which the natural world is made» (2018, p. 1). «Environment» provided that concept. As this idea evolved, so did understandings of how to best prevent environmental destruction on a global scale.

Throughout the second half of the twentieth century, United Nations agencies, offices, and programs developed a wide range of measures to protect the environment. Among those were UNESCO and UNEP's efforts to educate students, both young and old, about the environment and the risks humanity posed to it. As the concept of the environment and ideas for how to best ensure its well-being changed, so too did the characteristics and components of the international environmental education program UNESCO-UNEP created to teach about them. Beginning with advocacy for nature protection and natural resource conservation, IEEP evolved to include fostering an environmental ethic through a community-oriented, problems-based, interdisciplinary study of the ecology of the total environment and, later, to address practices in economic development that would sustain the health of the planet. By the 1990s, sustainable development had become environmental education's «new global ethic»⁸².

Twenty-years following the establishment of IEEP, *Connect* attempted to capture the accomplishments, challenges, failures, and future of the UNESCO-UNEP International Environmental Education program. Posing the question, «Environmental Education: Quo vadis?» [Where are you going?], it claimed that environmental education had experienced a rich period of growth and expansion before becoming «just another subject in the educational curricula»⁸³. Noting that the concept of sustainable development had done much to re-energize the field, it announced that environmental education would remain effective only if it made use of an «integrated approach». Environmental Education «must be re-oriented to systematically include other global themes» it asserted, «for it is now abundantly clear that solutions to environmental issues can neither be viable nor durable if they do not at the same time consider related problems of population and development»⁸⁴.

⁸¹ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 3, No. 1, January 1978, Paris: UNESCO, 3.

⁸² In due course, the United Nations declared the years 2005 through 2014 the UN Decade for Education for Sustainable Development. See <https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd>

⁸³ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 20, No. 2, June 1995, Paris: UNESCO, 2.

⁸⁴ *Connect: UNESCO-UNEP Environmental Education Newsletter*, 20, No. 2, June 1995, Paris: UNESCO, 2.

As humanity approached the twenty-first century, international understanding of the environment would undergo yet another stage in its evolution⁸⁵.

It is difficult, if not impossible, to comprehend the character of environmental education in the present without first recognizing the transformation that environmental education underwent during the second half of the twentieth century. IEEP conferences, declarations, agreements, workshops, seminars, and pilot projects were all necessary elements of UNESCO and UNEP's goal of encouraging the international community to commit to environmental education both nationally and globally. Even these efforts, however, were sometimes not enough to overcome the routines, practices, attitudes, and approaches to teaching and learning embedded in local contexts. As John McCormick concludes, «education was ultimately a national issue, and the work of UN specialized agencies was to be less productive in this area than the work of national NGOs» (1989, p. 109).

Nevertheless, from the perspective of the twenty-first century IEEP's urgent calls for a coherent plan of action in developing and implementing international environmental education were prescient. Around the world today, pervasive threats to the environment, including climate change, persist. In the United States especially, challenges exist both in convincing citizens that such threats are in fact real and in determining the most constructive actions to take in response to them. While both sets of challenges have educational components, the former in particular suggests the failure of the international community to heed and effectively implement the proposals put forth by IEEP almost a half century ago.

7. References

- Baker, J.R. (1978). *Julian Huxley: Scientist and World Citizen, 1887-1975*. Paris: UNESCO.
- Boardman, R. (1981). *International Organization and the Conservation of Nature*. London: MacMillan Press.
- Bousé, D. (2000). *Wildlife Films*. Philadelphia: University of Pennsylvania Press.
- Bramwell, A. (1989). *Ecology in the 20th Century: A History*. New Haven: Yale University Press.
- Caldwell, L.K. (1984). *International Environmental Policy: Emergence and Dimensions*. Durham: Duke University Press.
- Caldwell, L.K. (1996). *International Environmental Policy: From the Twentieth to the Twenty-First Century*. Durham: Duke University Press.
- Conca, K. (2015). *An Unfinished Foundation: The United Nations and Global Environmental Governance*. Oxford: Oxford University Press.

⁸⁵ On recent developments regarding education and sustainable development, see (Tilbury, 2015).

- Conil-Lacoste, M. (1994). *The Story of a Grand Design: UNESCO, 1946-1993*. Paris: UNESCO.
- Dorn, C. (2006). «The World's Schoolmaster»: Educational Reconstruction, Grayson Kefauver, and the Founding of UNESCO. *History of Education*, 35(3), 297-320.
- Dorn, C., & Ghodsee, K. (2012). The Cold War Politicization of Literacy: Communism, UNESCO, and the World Bank. *Diplomatic History*, 36(2), 373-398.
- Droit, R.P. (2005). *Humanity in the Making: Overview of the Intellectual History of UNESCO, 1945-2005*. Paris: UNESCO.
- Dubos, R. (1969). The Biosphere: A Delicate Balance between Man and Nature. *UNESCO Courier*, 22(1), 7.
- Gille, A. (1949). Preservation of Nature. *UNESCO Courier*, 2(5), 4.
- Gille, A. (1949). *Education for the Conservation and More Efficient Use of Natural Resources: An Enquiry*. Paris: UNESCO.
- Gough, A. (2001). For the Total Environment: Bill Stapp's Contribution to Environmental Education. *Australian Journal of Environmental Education*, 17, 19-24.
- Holdgate, M. (1999). *The Green Web: A Union for World Conservation*. Abingdon: Earthscan.
- Huxley, J. (1947). *UNESCO: Its Purpose and Its Philosophy*. Washington, D.C.: Public Affairs Press.
- Huxley, J. (1970). *Memories* (vol. 1). New York: Harper & Row.
- Huxley, J. (1973). *Memories* (vol. 2). New York: Harper & Row.
- Javaudin, E. (2017). Environmental Problem-Solvers? Scientists and the Stockholm Conference. In Kaiser, W., & Meyer, J.H. (Eds.), *International Organizations and Environmental Protection: Conservation and Globalization in the Twentieth Century* (pp. 74-102). New York: Berghahn Books.
- Laves, W.H.C., & Thomson, C.A. (1957). *UNESCO: Purpose, Progress, Prospects*. Bloomington: Indiana University Press.
- Lele, S.M. (1991). Sustainable Development: A Critical Review. *World Development*, 19(6), 607-621.
- Macekura, S. (2015). *Of Limits and Growth: The Rise of Global Sustainable Development in the Twentieth Century*. Cambridge: Cambridge University Press.
- Macekura, S. (2017). Towards «Sustainable» Development: The United Nations, INGOs and the Crafting of the World Conservation Strategy. In Kaiser, W., & Meyer, J.H., (Eds.), *International Organizations and Environmental Protection:*

- Conservation and Globalization in the Twentieth Century* (pp. 241-267). New York: Berghahn Books.
- Manulak, M.W. (2017). Developing World Environmental Cooperation: The Founex Seminar and the Stockholm Conference. In Kaiser, W., & Meyer, J.H. (Eds.), *International Organizations and Environmental Protection: Conservation and Globalization in the Twentieth Century* (pp. 74-102). New York: Berghahn Books.
- McCormick, J. (1989). *Reclaiming Paradise: The Global Environmental Movement*. London: Belhaven Press.
- McIntosh, R. (1986). *The Background of Ecology: Concept and Theory*. Cambridge: Cambridge University Press.
- Meyer, J.H. (2017). From Nature to Environment: International Organizations and Environmental Protection before Stockholm. In Kaiser, W., & Meyer, J.H. (Eds.), *International Organizations and Environmental Protection: Conservation and Globalization in the Twentieth Century* (pp. 31-73). New York: Berghahn Books.
- Mickelson, K. (2015). The Stockholm Conference and the Creation of the South–North Divide in International Environmental Law and Policy. In Alam, S., Atapattu, S., Gonzalez, C.G., & Razzaque, J. (Eds.), *International Environmental Law and the Global South* (pp. 109-121). Cambridge: Cambridge University Press.
- Mitman, G. (1999). *Reel Nature: America's Romance with Wildlife on Film*. Cambridge: Harvard University Press.
- Pace, P. (1996). From Belgrade to Bradford — 20 Years of Environmental Education. In Filho, W.L., Murphy, Z., & O'Loan, K., (Eds.), *A Sourcebook for Environmental Education: A Practical Review Based on the Belgrade Charter*. New York: Parthenon Publishing Group.
- Preston, W., Herman, E.S., & Schiller, H.I. (1989). *Hope & Folly: The United States and UNESCO, 1945-1985*. Minneapolis: University of Minnesota Press.
- Robinson, J. (2004). Squaring the Circle? Some Thoughts on the Idea of Sustainable Development. *Ecological Economics*, 48(4), 369-384.
- Rowland, W. (1973). *The Plot to Save the World: The Life and Times of the Stockholm Conference on the Human Environment*. Toronto: Clarke, Irwin.
- Schleper, S. (2019). *Planning for the Planet: Environmental Expertise and the International Union for Conservation of Nature and Natural Resources, 1960-1980*. New York: Berghahn Books.
- Soroos, M.S. (2005). Global Institutions and the Environment: An Evolutionary Perspective. In Axelrod, R.S., Downie, D.L., & Vig, N.J., (Eds.), *The Global Environment: Institutions, Law, and Policy* (pp. 21-42). Washington, D.C.: CQ Press.

- Stapp, W.B. (1969). The Concept of Environmental Education. *The Journal of Environmental Education*, 1(1), 30-31.
- Stapp, W.B. (1975). Environmental Education: Dynamics of the Unesco-UNEP Programme. *Impact of Science on Society*, 25(4), 331-332.
- Stone, P. (1973). *Did We Save the Earth at Stockholm?* London: Earth Island.
- Swann, J.A., & Stapp, W.B. (Eds.). (1974). *Environmental Education: Strategies Toward a More Livable Future*. New York: John Wiley & Sons.
- Tilbury, D. (2015). Education for Sustainability: A Snakes and Ladders Game. *Foro de Educación*, 13(19), 7-10.
- Valderrama, F. (1995). *A History of UNESCO*. Paris: UNESCO.
- Warde, P. (2011). The Invention of Sustainability. *Modern Intellectual History*, 8(1), 153-170.
- Warde, P., Robin, L., & Sörlin, S. (2018). *The Environment: A History of the Idea*. Baltimore: Johns Hopkins University Press.
- Wöbse, A.K. (2011). «The World After All Was One»: The International Environmental Network of UNESCO and IUPN, 1945-1950. *Contemporary European History*, 20(3), 331-348.
- World Commission on Environment and Development (1987). *Our Common Future*. Oxford: Oxford University Press.
- Worster, D. (1994). *Nature's Economy: A History of Ecological Ideas*. Cambridge: Cambridge University Press.
- Wu, A.Z. (2020). Bridging Ideologies: Julian Huxley, Détente, and the Emergence of International Environmental Law. In Craven, M., Pahuja, S., & Simpson, G. (Eds.), *International Law and the Cold War* (pp. 189-213). Cambridge: Cambridge University Press.