Learning to Change the Future

A bird's-eye view of the history of the IUCN Commission on Education and Communication

by Frits Hesselink and Jan Čeřovský

CEC
Commission on Education and Communication

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Cover photo by Jan Čeřovský: IUCN/Field Studies Council course in environmental education for teacher trainees, North Wales, UK, August 1971.

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Utrecht – Prague, June 2011

Introduction

The dynamics of a knowledge network – inspiration, new ideas, new learning. - is rarely documented. Years later all that is often left are publications on a shelf, names in archives and myths and stories about the old days. But let it not be forgotten that individuals initiated actions promoting programs, projects and opportunities for many others to improve their knowledge, attitudes and skills. In an attempt to learn from the development of the CEC knowledge network over time we studied various records[2] and questioned eye-witnesses[3].

We are most interested in the main shifts in paradigms, commission goals and leading thinkers, and less in a detailed description of all past events[4]. We came across many strengths and weaknesses of a formal and voluntary knowledge network. We wish this short history will provide new generations in CEC, IUCN and the wider conservation

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[2] Sir Martin Holdgate, The Green Web, A Union for World Conservation, Earthscan, London, 1999, ISBN 1 85383 595 1; Jan Čeřovský, Notes on the history of CEC (IUCN CEC Archives); IUCN Bulletin, various issues, particularly the 1988 Special 40th Anniversary Edition (IUCN library); IUCN Newsletter Central and Eastern Europe, vol. 1998 in particular; IUCN Yearbook 1966-1968, 1970 and WWF Yearbooks 1968-1971/72, 1977/78; IUCN CEC archives (IUCN basement, approximately 6,5 meters of bookshelves with documentation, starting from 1960 unto today); IUCN EduC archive of Johannes (Hans) Goudswaard (4,5 meters of documentation from the late fifties unto the late seventies, in the International Institute of Social History, Amsterdam); Wendy Goldstein, Departing Notes, CEC archives.
We have tried to credit the sources of the photographs used. Not always we could trace them. Those who have knowledge of missing sources are requested to contact the authors.

[3] The authors wish to thank Andy Alm (USA), Boštjan Anko (Slovenia), Peter Bos (The Netherlands), Wolfgang Burhenne (Germany), Susana Calvo Roy (Spain), Ricardo Carvalho (Brazil), Juanita Castaño (Colombia), Vladimir Galushin (Russia), Wendy Goldstein (Australia), Denise Hamú (Brazil), Branka Hlad (Slovenia), Shivani Jain (India), Chris Maas Geesteranus (The Netherlands}, Gerald Liebermann (USA), Julia Marton-Lefèvre (Switzerland}, Jeff McNeely (Switzerland), Cecilia Nizzola-Tabja (Switzerland), Mamata Pandya (India), M.A. Partha Sarathy (India), Franco Pedrotti (Italy), Ana Puyol (Ecuador), Kartikeya Sarabhai (India), Daniella Tilbury (UK), Peter Townsend (UK), and Keith Wheeler (USA) for their advice, input, corrections and suggestions.

[4] For those interested in this type of information: on the CEC website we have – with the help of CEC member Andy Alm – made timelines with all CEC publications, events and other data that we have collected: http://www.iucn.org/cec/.

community with some idea of where it all started and what metamorphosis CEC went through since the early days of IUCN. For us it has been an exciting learning exercise[5].

The authors wish to thank Susan Guthridge-Gould and Chris Maas Geesteranus for editing the final text.

1. CEC, the oldest Commission of IUCN

In 1948 IUCN was founded as the International Union for the Protection of Nature (IUPN), a Union of States and NGOs. Since 1900 various efforts had been undertaken develop international cooperation in nature conservation to protect what was later called the integrity of the world biosphere. Particularly Swiss naturalists made attempts towards organized action. Both world wars hampered these attempts. Shortly after 1945, two conferences on international nature conservation were held in Switzerland (Basel 1946, Brunnen 1947). They paved the way for the 'Constitutive Conference of the International Union for the Protection of Nature' invited by UNESCO with the vigorous support by its Director-General Julian Huxley. The conference took place from 30 September to 7 October 1948 in Fontainebleau, France, and was attended by representatives of 25 governments, 126 national institutions and 8 international organizations[6].

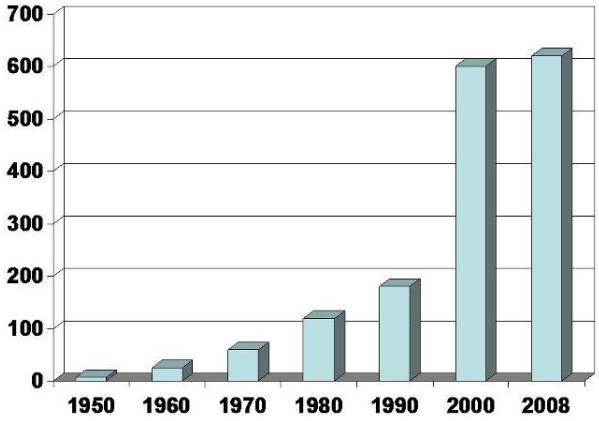
A small Secretariat headed by Jean-Paul Harroy (Belgium) was established in Brussels to serve IUPN. It was the time of post-war reconstruction, the beginning of the cold war and decolonization and the beginning awareness of population pressures on natural resources. According to its original statutes IUPN had six fields of work, including: 'to educate adults and children to realize the danger which lies in the alteration of natural resources and the necessity of action against such a danger'. The founding conference at Fontainebleau appointed William Vogt (USA, 1902-1968) to chair the first IUPN Commission - the Permanent Committee on Conservation Education - to tackle this field of work. He was one of the founding fathers of IUPN and a well known ornithologist.

The Commission on Education - as such established in 1949 by the IUPN Council - initially had eight members. This predecessor of the current IUCN Commission on Education and Communication (CEC) was generally shortly referred to as EduC[7].
In the early years Commission Chairs were appointed by the IUCN Council, for a two year period and were eligible for re-appointment indefinitely. This later changed and today we have terms of four years. And Commission Chairs are only eligible for a maximum of two terms. They are elected by IUCN members during the IUCN General Assembly, now called the IUCN World Conservation Congress.

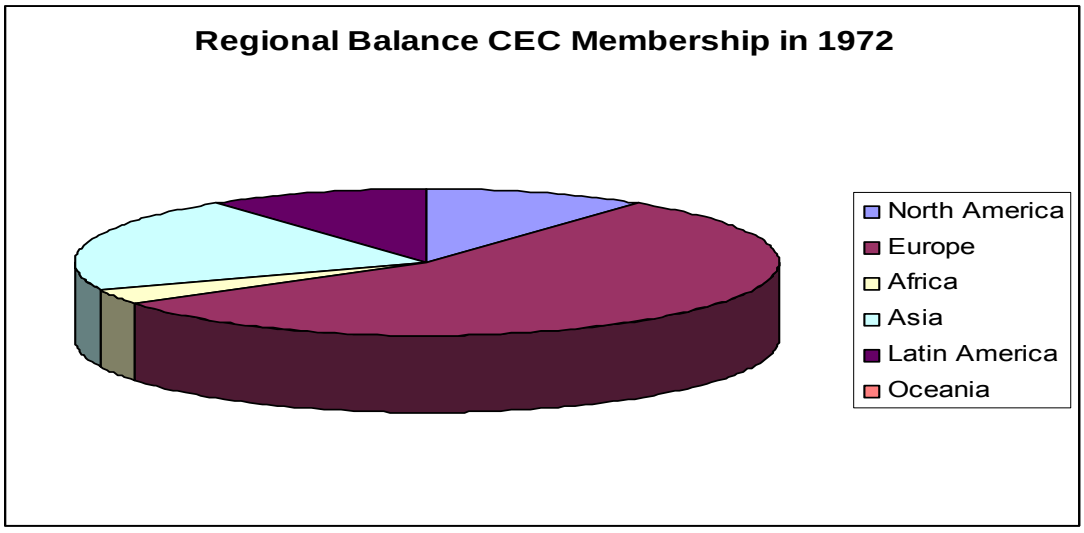
Membership of Commissions was from the beginning rather restricted and used to be conferred to those who were outstanding conservation leaders and renowned scientists in their field of expertise. Even in the seventies IUCN Commissions had not many mem-

[5] For those readers who are not much acquainted with the worlds of conservation and education, we have provided in annex 1 a short glossary and list of acronyms.
[6] The history of IUCN is in much detail described by Sir Martin Holdgate in his work The Green Web, A Union for World Conservation, Earthscan, London, 1999.
[7] In 1990 the General Assembly in Perth changed the name of the Commission on Education into Commission on Education and Communication (CEC). To avoid unnecessary confusion for the reader the authors have chosen to use the name CEC throughout the text, also for the period the Commission was called EduC.

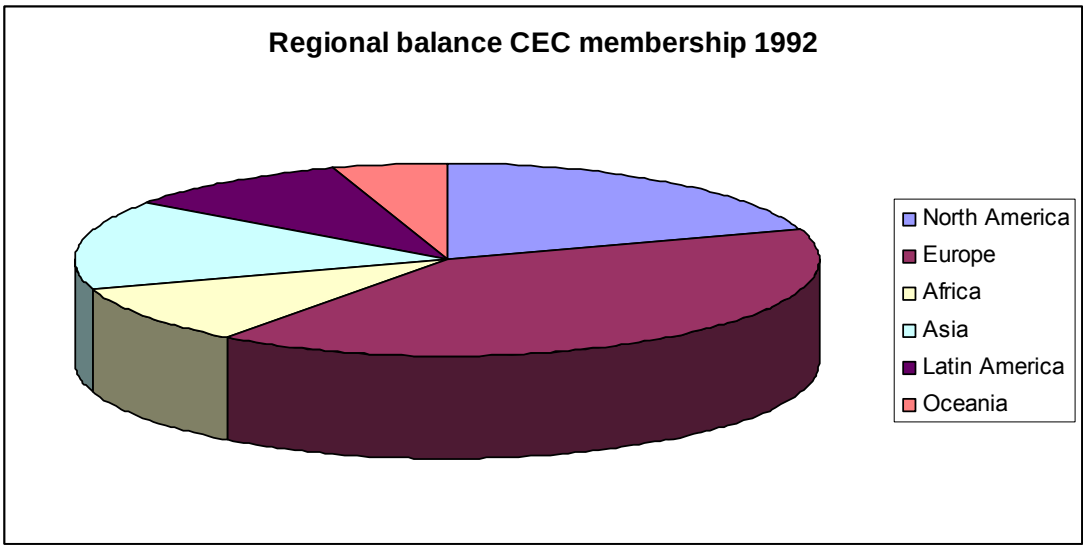
bers as today. In the mid sixties CEC had 15 members from 14 different countries, in 1970 29 from 21 countries (mostly from the North)[8]. Members of regional committees were not automatically CEC members; nowadays they are. Mostly only the chairs of regional committees were, in part accounting for the low number of Commission members. This membership policy imposed distance between the Commission and the regions, leaving the regional activities largely in the hands of individual chairs – each with different levels of mobilization and leadership. The big change in CEC membership came in the nineties. Although the first steps towards regionalization started in the sixties, regional balance in CEC was only achieved at the end of the nineties. Gender balance still has not been completely achieved in all regions.

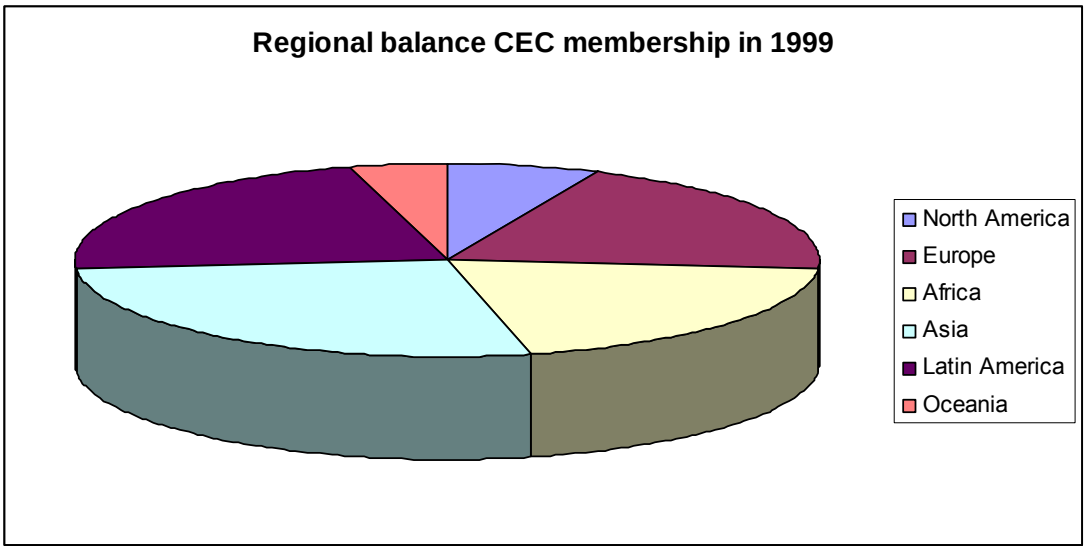


Development of CEC membership over the years.



[8] By way of comparison: SSC, the largest of the IUCN Commissions, that time called the Survival Service Commission, established in 1949 had initially 40 members. In 1970 SSC numbered 80 members from 25 countries, also in majority from Europe and North America. Today it has over 7000 members worldwide.

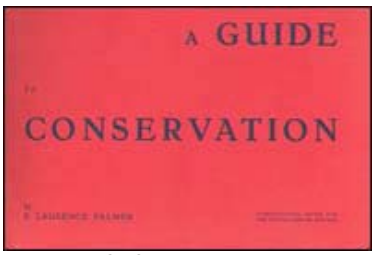

Regional balance CEC membership 1992
North America
Europe
Africa
Asia
Latin America
Oceania


Regional balance CEC membership in 1999
North America
Europe
Africa
Asia
Latin America
Oceania

2. 1950s: Promoting nature conservation

In the mid of fifties, nature was basically seen as wildlife with a strong focus on outstanding natural features: species, sites and areas, threatened by economic development and population growth[9]. This view of nature was a point of contention between Americans and Europeans, among others. However, the prevailing opinion of the founding fathers of IUPN was that the public needed to become aware of the importance of the conservation of wildlife. To do so CEC should focus on schools.

In 1950 with the financial support of UNESCO 39.000 booklets for teachers and 130.000 illustrated pamphlets for students were distributed in Italy in a first campaign to raise awareness[10]. The idea was that the Commission would call on its experts in different countries to up-scale the Italian approach and make IUPN indispensable to UNESCO to sustain its financial support[11].



William Vogt (right on photo); Ira Gabrielson; Max Nicholson; the first IUCN Publications: CEC products!

In 1952 Ira Gabrielson (USA, 1889-1977), another founding father of IUPN, was appointed by the IUPN Council as Chair. During his term the Commission produced the first IUPN publication 'A Guide to Conservation', prepared by Laurence Palmer, an American scholar and colleague of Gabrielson.

In 1956 the General Assembly in Edinburgh, UK, changed the name to IUCN, International Union for Conservation of Nature and Natural Resources in order to overcome 'a much more limited and perhaps more defensive or sentimental image'[12]. The change of name broadened the scope of the IUCN´s action. In the fifties CEC focused on outdoor and out-of-school nature education in accordance with the slogan 'take them out' promoted by the famous conservationist Edward Max Nicholson (UK, 1904-2003), also a founding father of IUPN. He served as CEC Chair from 1958-1960.

CEC helped to organize youth summer camps mostly in Europe and North America. And in 1956 CEC helped to create International Youth Federation for the Study and Protection of Nature (IYF) with Jacques de Smidt, a Dutch university student as its first President[13]. For the next two decades IYF functioned as a 'youth arm' of IUCN. After the mid

[9] The population threat as main cause of environmental degradation – especially advocated by North Americans - was right from the start debated. It lead to a number of conflicts in CEC and finally to the resignation of William Vogt as CEC Chair.
[10] Holdgateop.cit., p. 50.
[11] Although the Caracas General Assembly in 1952 adopted the Manifesto for Nature Protection, that called for an international awareness campaign, CEC never realized the up-scaling of the Italian pilot. UNESCO also was reluctant to continue financing IUPN activities and was of the opinion that the latter should raise its own funds.
[12] In the words of Lee M. Talbot, Director-General of IUCN (1980-1982), quoted in Holdgateop.cit., p. 64.
[13] Since 1952 throughout the fifties, camps oriented at nature study and conservation were held in Austria, Belgium, Federal Republic of Germany, Finland, Italy, Netherlands, Sweden and UK.

seventies the good relations began to fade out until their total collapse in the mid eighties.

Campfire at the 3rd General Assembly of IYF during the camp in Evo, Finland, August 1958. Photo Alpo Luomajoki.

1960s: Conservation education extends over a global scene

The 1959 revision of the IUCN Statutes still describes education as a key area of work for IUCN. Art. II on Tasks of IUCN reads under c.: 'Promotion and wide diffusion of education and information aimed at increasing public awareness of nature protection and conservation of natural resources'. The mandate of CEC at the time focused on educational policies and youth. In 1960 the IUCN General Assembly took the decision to move the Secretariat from Belgium to Switzerland. The Assembly also appointed the leading Russian conservationist Lev K. Shaposhnikov (1915-1979) as CEC Chair. He held this office from 1960 to 1978[14].

In this decade the concept of ecology emerged. UNESCO started its programme Man & Biosphere and IUCN started its Commission on Ecology. Ecology, the interconnectedness in nature and the role and impact of the human species meant for CEC a further broadening of its scope. Conceptually it was the start of seeing conservation education – with a focus on building capacities for free and informed choices – as different from the scientific and technical paradigms of conservation itself. In 1966 IUCN fully delegated the responsibility for the IYF to CEC[15].

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[14] Politics definitely played a role in these appointments. Most other chairs were from North America or Western Europe. It seemed politically correct at that time to have a representative from the former USSR as CEC Chair. The long period that Shaposhnikov held office has only been equaled by Wolfgang Burhenne (Germany, 1928), Chair of the IUCN Law Commission.

[15] With support from CEC IYF now also organized for the first time youth events in East Europe and in Africa (Kenya). Of a special interest was the International Youth Conference in Oxford, UK, attended by 150 participants. CEC members acted as keynote speakers.

Lev Shaposhnikov; Don Aldridge; Pierre Goeldlin; Jan Čeřovský; Report on Nature Conservation in Eastern Europe.

In 1968 UNESCO convened the World Biosphere Conference of governmental experts in Paris, starting the global 'first environmental wave'. The conference was divided into three commissions, among them one on education chaired by Jan Čeřovský (former Czechoslovakia, 1930)[16]. The result was the first international elaboration of the concept of environmental education. It described education as a life long process both in schools of all types and levels as in out-of-school activities, integrated within the entire general education. It promoted a close link between the natural and social sciences. And it recognized the importance of local and regional cultural, educational, scientific and cultural patterns. CEC played an important role in the conference, although it was still relatively small and consisted mostly of biologists from Europe and North America with an affinity for education.

In the late sixties Jan Čeřovský was appointed as the first education officer in the Secretariat[17], a position he held until the early seventies. He was instrumental in launching a mimeographed CEC Newsletter published regularly during the years of his service in the Secretariat. The IUCN General Assembly in Poland 1960 adopted a CEC initiated recommendation to start establishing regional committees of commissions.

The first regional committee of CEC was formed in 1960. The North West Europe Committee for Environmental Education (NWEC)[18]. Following its example, the East European Committee (EEC) was established in 1967[19]. EEC has played a unique role, as it was the first and only internationally established conservation body east of the 'iron curtain'.
In the mid sixties CEC held conferences in Bangkok (Thailand)[20] and Bariloche (Argentina)[21]. These were important events in these regions to spread the idea of conservation education and start CEC networks. Between the late sixties and early seventies regional committees of CEC were established in India, North America[22], Latin America[23], South

[16] He was provided with secretarial assistance by the Venezuelan Gerardo Budowski (then programme specialist in the UNESCO Secretariat, later (1970-1976) Director-General of IUCN, and today a long time CEC member).
[17] Before this time - from the mid fifties and throughout most of the sixties - Hans Goudswaard (Netherlands) served CEC as Honorary Secretary, in a voluntary capacity.
[18] One of the leading thinkers on education of the time in Europe was the Norwegian Professor Ove Arbo Høeg. He became the first NWEC Chairman.
[19] Professor Tadeusz Szczecny of Poland as the first Chair of EEC and Mária Lexová from the former Czechoslovakia its Secretary.
[20] Conference on Conservation of Nature and Natural Resources in Tropical South-East Asia (Bangkok, Thailand, 1965).
[21] Latin American Conference on the Conservation of Renewable Natural Resources, 1968).
[22] The North American Regional Committee of IUCN EduC was inaugurated during a conference at The Conservation Foundation, Washington DC. in March 1968, and held it first formal meeting at the National

and Central Africa and Western (francophone) Africa: unfortunately, they were only short-lived ones[24].

Left: The establishing conference of the East European Committee, Praha, Czech Republic, September 1967. From left to right: Thomas Pritchard (CEC Deputy Chair), Lev K. Shaposhnikov (CEC Chair), Vladimir Novotny (Director, Czech Institute for Protection of Monuments and Nature), Jan Čeřovský (CEC Deputy Chair), Frantisek Tepper (Head, Department of the Czech Ministry for Culture), Joseph Berwick (IUCN Secretary General), interpreter.
Photo archive, Czech Agency for Nature Conservation and Landscape Protection.

Middle: Break during the meeting of NWEC, Germany, May 1967. From left to right: Martha ("Muffy") Henderson (USA, later the second wife of Harold J. Coolidge, IUCN President 1966-1972), Jan-Piet Doets (The Netherlands), Thomas Pritchard (UK).
Photo Jan Čeřovský's archive.

Right: Participants of the international Third Czechoslovak 'Intercamp' organized by IUCN CEC/IYF, held in the Czech Krkonoše (Giant Mountains) National Park during the stirred days – after the invasion of Russian troops – of late August 1968.
Photo Jan Čeřovský's archive.

1970s: Developing the concepts of Environmental Education

The seventies saw an immense growth in environmental actions by governments and NGOs[25]. The decade was marked by the Stockholm UN Conference on the Human Environment (1972) and the Tbilisi UNEP/UNESCO Intergovernmental Conference on Environmental Education (1977)[26]. IUCN CEC took part in the preparation of both of them and organized preceding expert meetings in Europe and North America to elaborate the concepts of environmental education. Population growth and Western consumption patterns were seen as the main causes of environmental degradation. The approach towards solutions was to maintain ecological processes, genetic diversity and sustainable use. The role of environmental education and participation was to achieve a change in behaviour.

Of special importance was the UNESCO-sponsored IUCN World Seminar on Environmental Education in School Curricula (Carson City, Nevada, USA, 1970)[27] with a con-

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Academy of Sciences in Washington with James L. Aldrich as the first Chair and Martha T. Henderson as Secretary.

[23] The Chair of the Latin American Committee was Arturo Eichled from Venezuela, author of the first university conservation textbook in Spanish.

[24] The lack of sufficient secretarial support from IUCN Headquarters definitely played a role here. Also these Committees had no members who could do secretariat work for the regional committee on a voluntary basis in the time their government allowed them, as was the case for NWEC and EEC.

[25] See also Holdgateop.cit., p. 158.

[26] See also the following history of international environmental education: Sarabhai, K.V., M. Pandya and R. Namagiri, 2007. Tbilisi to Ahmedabad. The Journey of Environmental Education. Centre for Environment Education, Ahmedabad.

[27] The meeting was hosted by the Foresta Institute for Ocean and Mountain Studies, and chaired by its Director Richard G. Miller, member of CEC.

siderable number of participants from the South. The Seminar endorsed the definition of environmental education recognized and used for many years:

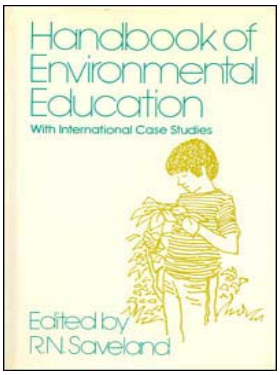
'Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his biophysical surroundings.
Environmental education also entails practice in decisions-making and self-formulation of a code of behaviour about issues concerning environmental quality'.

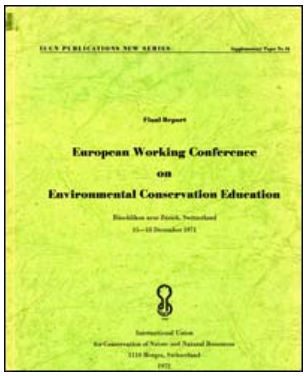
The meeting also worked out a chart on the integration of environmental education into the entire school curricula at different levels. The seminar triggered a range of follow-up meetings and other activities in several home countries of the participants.

IUCN CEC was also heavily involved in the first ever World Youth Conference on Environment in 1971 (Hamilton, Ontario, Canada) taking an active part in its preparation and implementation. The event has been a 'youth overture' of the 1972 UN Stockholm Conference – a fact confirmed by personal participation of the UN Conference Chief Executive Maurice Strong.

Another major CEC event was the First European Conference on Environmental Conservation Education in Rüschlikon near Zürich, Switzerland 1971[28]. One of the recommendations of this conference urged the governments 'to make it possible for individuals to give service to the community in the environmental field as an alternative to compulsory military service'[29].

In the late sixties and early seventies CEC was supported by grants from WWF. The intellectual potential of the CEC gathered in early seventies is reflected in the Handbook of Environmental Education[30], edited on behalf of the Commission by Robert N. CEC member and one of the leading thinkers in the 1970 International
Working Meeting on Environmental Education in the School Curriculum (Carson city, Nevada).





[28] The conference was attended by 109 representatives of 21 European countries and 9 international organizations, and 13 observers from countries outside Europe – a large event for the time.
[29] This was the reason why a Russian translation of the Conference Final Report was not allowed to be published in the USSR.
[30] R. N. Saveland, Handbook of Environmental Education, with International Case Studies, Wiley & Sons Inc., 1976.

Left: The participants of the IUCN-Field Studies Council international course in environmental education for teacher trainees, Bets-Y-Coed, North Wales, UK, August 1971, interviewing locals about their environment.Photo Jan Čeřovský.

Middle: Cover of the CEC Handbook of Environmental Education.

Right: CEC Conference Proceedings of the Rüschlikon Conference.

The North WestEurope Committee was now meeting yearly. Governments and conservation institutions in the host countries provided financial support. One of the persons instrumental for the success and continuity of NWEC was Chris Maas Geesteranus (Netherlands, 1945) as its long serving Secretary (1975-1988) and as Chairman (1988-1995). As the EEC activities in Eastern Europe were declining, the NWEC again was in practice increasingly driving the global commission that still had a very small membership. Members of regional committees were mostly not members of CEC as stated earlier, only their leaders were. The discourse in NWEC focused very much on pedagogy, on the role of nature in personal development in various learning situations, and on the contribution of education to solving environmental problems in society. Much less attention was paid to conservation as the overarching objective[31].

At the preparatory workshop for the new UNESCO/UNEP International Environmental Education Programme in Belgrade (former Yugoslavia) in October 1975, half of the keynote speakers were CEC members. They were coordinated by James L. Aldrich, Chair of the CEC North American Regional Committee. The endorsed 'Belgrade Charter' has pointed out eight fundamental principles of environmental education:

1. To take into account the environment as a whole with all both natural and human-made aspects;
2. To be a continuous life-long process;
3. To be interdisciplinary in its approach;
4. To emphasize the participation in problem solving;
5. To act globally but with respect to regional differences;
6. To consider both present and future situations;
7. To examine the entire development and growth from the environmental perspective;
8. To promote local, national and international co-operation.

At the Tbilisi Conference CEC[32] presented the key statement on environmental education and prepared draft reports on several major issues. Internationally the IUCN CEC was at that point in time in a strong position to claim a role in the emerging IEEP (International Environmental Education Programme) of UNEP/UNESCO. But CEC did not capitalize on it, partly because of its conceptual focus, partly because of lack of Secretariat support[33] and partly because it did not manage to avoid the ensuing leadership struggles. To coordinate international education activities it was customary since this

[31] 'We actually did not want to have anything to do with just conservation but with people's critical view on society. We were against an instrumental use of education *(*for policy-making objec*tives*); for us that was too close to propaganda and indoctrination', stated Chris Maas Geesteranus in an interview with one of the authors.

[32] In this period Commission Chairs could speak and undertake activities on behalf of IUCN. In most reports on international education events not CEC (or the IUCN Education Commission) was mentioned, but just IUCN.

[33] The position of CEC in the IUCN Secretariat was further weakened by Jan Čeřovský having been retired by his government (for political reasons) back to Prague in 1973. After that the CEC matters were administered by Alfred Hoffmann who at the same time served the Commission on Landscape Planning.

time until the mid nineties to have representatives of UNEP, UNESCO and WWF on the CEC Steering Committee

In 1978 the General Assembly of Ashkabad, USSR, expressed widespread concerns over the unclear mandate and performance of the Commission on Education. Shaposhnikov realized it was time for a change and gave up his chairmanship. The result was that there was no CEC candidate to vote for. In its next session after the General Assembly Council appointed 'an excellent Scottish Environmental Education expert', Don Aldridge (UK, 1930-2008), as the new Chair. This appointment however was 'blocked by rival candidates', as Holdgate – maybe a bit biased - put it[34]. Council then appointed Pierre Goeldlin (Switzerland, 1937), the Swiss epresentative to the IUCN Council, as Acting Chair. He tried hard to find a new permanent chair. Reporting about CEC to Council, Goeldlin attributed the problems to 'the abstract nature of educational concepts and the wide scope of the subject'[35]. In hindsight the problems IUCN had at the time to position itself vis-à-vis UNESCO, UNEP and WWF may also have been a factor in the conflicts.

1980s: Education no longer an IUCN priority

In 1980 IUCN published the first World Conservation Strategy (WCS)[36]. Holdgate described the WCS as 'possibly IUCN's most important single contribution in the whole of its history'[37]. Chapter 13: Building support for conservation: participation and education' was placed among 'priorities for national action'. However, education was no longer a priority area of work for the Union. The conceptual work done by the Commission for UNESCO, UNEP and the wider environmental education community was not valued in IUCN as it had no direct connection with the overall programmatic work of IUCN.

Things seemed to change a little with the election of Al Baez (USA, 1913-2007), in 1979. This Chair had a background in science education, unlike the conservation or biology background of his predecessors[38]. He focused on formal education and training, but did not avoid politics[39]. He was assisted by Deputy Chair Julia Marton-Lefèvre (Hungary, 1954), currently Director-General of IUCN. At that time she was deputy and later director of the International Council of Science Unions (ICSU).

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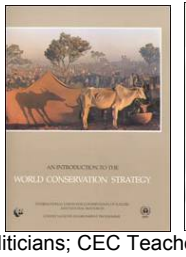
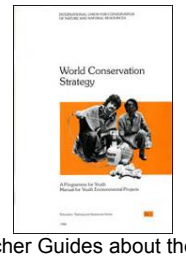
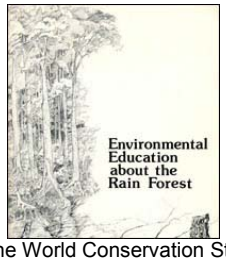
[34] See Holdgate op.cit., p. 143. Don Aldridge's many publications included a Guide to Interpretation and the entertaining illustrated Monster Book of Environmental Education for the Council of Europe.
[35] See Holdgate op.cit, p. 143.
[36] IUCN: World Conservation Strategy, Living Resource Conservation for Sustainable Development. IUCN, Gland, Switzerland, 1980.
[37] Holdgate op.cit., p.149.
[38] Naseeb Dajani (Jordan) supported the Commission in the Secretariat. He was the first Commission support staff in IUCN from the South. For some obscure reasons, Dajani was fired in 1984 which awoke a wave of protests against IUCN leadership, not only among the CEC membership; see Holdgate op.cit., p. 184. In the second half of this decade the Commission was shortly supported by Salvano Briceño (Venezuela) and Dart Thalman (USA); the latter even wrote a kind of 'business plan' for CEC. From the mid eighties until 1991 CEC again lacked any Secretariat support in IUCN headquarters.
[39] Chris Maas Geesteranus remembers: "He once quoted a (former) rector of Harvard University, before a company of government officials, saying: 'If you think education is expensive, try ignorance'. In 1983 he invited the Prime Minister of India Ms. Indira Gandhi to be Honorary Chairperson of the CEC which she has accepted".







Al Baez; Julia Marton-Lefèvre; CEC brochure for politicians; CEC Teacher Guides about the World Conservation Strategy and the Rain Forest.

Among a range of products CEC developed a multi media pack for teachers on the WCS, a guide on training opportunities for protected area managers and a guide for the formation of wildlife clubs. Wildlife clubs were seen as one of the major vehicles to raise awareness, especially in African countries. Notwithstanding a range of concrete CEC activities, the IUCN Secretariat at headquarters expected from the CEC activities, what the mass media campaigns had done for WWF. IUCN wanted more support to reach governments and to enable them to influence and change their policies. CEC was perceived not to be up to that task but, on the other hand, it engaged in conceptual work for UNESCO, UNEP and the wider environmental education community[40].

Al Baez did not stand for re-election. There were disagreements between IUCN and WWF about a range of subjects[41]. Education was one of them. There were also quarrels between the IUCN leadership and the CEC Chair. It often was about (lack of) financial support or human resources. But the underlying reasons were to be found in a disconnect between the work of CEC and that of IUCN or, more sharply, between goals and practice of CEC-led environmental education on the one hand, and conservation science and technical conservation projects of the whole organization on the other.
It even occurred at the General Assembly in San José (Costa Rica, 1988) that NWEC members and some from the USA did stand up during plenary sessions one after another in order to make clear their point about the values of education, of their respective committees and of CEC in general.

In the meantime much of the conceptual environmental education discourse continued in the North West Europe Committee, away from mainstream thinking in Gland. This committee embarked more and more on its own path almost to the extent that it became a network in itself and apart from CEC, not in the least because of the total lack of Secretariat support of and understanding for its view on European educational priorities. It played an increasingly important role working with its Eastern European counterpart in exchanging ideas and experience across the iron curtain[42]. In 1984 both European Regional Committees held their first joint meeting in Helsinki/Espoo, Finland. Al Baez and Julia Marton-Lefèvre acted as chairpersons: the meeting marked the beginning of a new

[40] This also had its negative effects on the relation between the Commission and the Secretariat, see Holdgate op.cit., p. 184.
[41] See Holdgate op.cit., pp. 171 and 184.
[42] The declining East Europe Committee enjoyed a vigorous revival in 1982. During the remaining years of the cold war the EEC served as an IUCN stronghold in this part of the world, and together with the Commission for Landscape Planning (CLP), and the Committee on Ecological Development of Cultural Landscapes (CECL) based in Central and Eastern Europe, it played a vital role in the new IUCN East Europe Programme (EEP).

East-West cooperation in IUCN[43]. The joint meetings continued every two years combined with topical conferences[44].

Left: Participants of the NWEC and EEC joint meeting, Bø, Norway, June 1988, starting to experience the "Take them out" in Norwegian style: a 2 day tour of 40 kilometers in the wild nature of the Telemark mountains.
Photo Jan Čeřovský.

Middle: Conference on education for sustainable development for Norwegian educators, organized by NWEC and EEC, Bø, Norway, June 1988. John Smyth delivering his lecture.
Photo Josef Velek.

Right: Joint meeting of NWEC and EEC, Bø, Norway, June 1988, opening session. From left to right: Enikø Szalay-Marzsó (Deputy Chair, EEC), Jan Čeřovský (IUCN Councillor), Chris Maas Geesteranus (Chair, NWEC).
Photo Josef Velek.

During the eighties CEC struggled vigorously for its survival, when shortly after his election 1984[45] as chair Gerald Lieberman (USA,1950) ran into a series of continuing conflicts with the IUCN Secretariat, again about lack of staff support for the Commission and about UNEP funding for the International Youth Conference on the Environment[46]. In 1986 after consulting Kenton Miller, then the IUCN Director-General, Lieberman resigned in favour of Deputy Chair M.A. Partha Sarathy (India,1923). Partha used all his diplomatic qualities to get CEC towards safer waters and away from mainstream IUCN criticism.

At the General Assembly in Costa Rica in 1988 Partha had the name of the Commission changed into Commission on Education and Training and tried to work with UNEP on training issues. As IUCN continued its denial of all support to the Commission, Partha

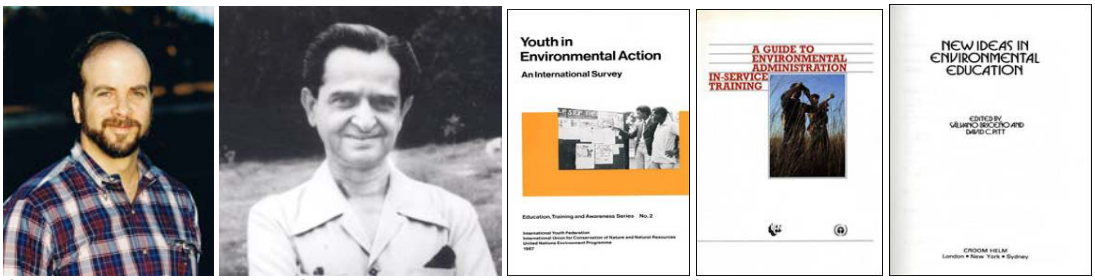
[43] Chris Maas Geesteranus remembers the atmosphere of the last years of the cold war: “The country was seen by both parties as neutral. The meeting was friendly and professionally useful. But our Eastern counterparts insisted – probably for internal use at home – to have a formal final declaration of the meeting that referred to progress and world peace; on their socialist conditions”.

[44] 1986 in Kecskemėt, Hungary (education in protected areas), 1988 in Bø, Norway (education for sustainable development), 1990 in Møn, Denmark (environmental education in agricultural environments), 1992 Kransjka Gora, Slovenia (sustainable tourism), 1994 Jūrmala, Latvia (Planning environmental education in Europe).
Key players in the European networks were John Baines, Jan Čeřovský, Anne von Hofsten, Jiří Kulich, Chris Maas Geesteranus, Claus Helweg Ovesen, John Smyth, and Enikő Szalay-Marzsó (Chair of EEC from 1990, IUCN Regional Councillor 1990-1994).

[45] The General Assembly in Madrid in 1984 had witnessed a conflict between IUCN and the International Youth Federation on a formal issue of being allowed to speak to the General Assembly. In the end this led to a break in the relations between the two organizations. The disconnect between the overall IUCN Programme and the CEC youth and education activities may well have been the underlying reason for the conflicts.

[46] The proposal to hold such a meeting in the framework of the UNEP International Year of Youth” was one of the initiatives promoted by the NWEC and EEC joint meeting in 1984. Lieberman traveled to Moscow to make arrangements directly with the Soviet government to get the initiative off the ground. The conference attended by hundreds of students was a great success.

Sarathy kept the network going for some time[47]. He then decided to move the CEC Secretariat to Bangalore, India[48].



Gerald Lieberman; M.A. Partha Sarathy; Youth in Environmental Action; A Guide to Environmental Administration – In-service Training; New Ideas in Environmental Education.

At the end of the eighties the total membership of CEC was almost 80 members, predominantly from the North[49] and mostly academics, biologists, science educators, pedagogical researchers, teacher trainers etc. In hindsight one could say that it was time for CEC to reinvent itself and focus on new areas of knowledge, beyond the classical environmental education, outdoor activities with youth and conceptual and academic discourses. Most importantly the challenge was to connect with the fast growing IUCN programme.

1990s: Championing Strategic Planning of Education and Communication

The early nineties were marked by Caring for the Earth (1992), to be seen as IUCN's second World Conservation Strategy and the concept of sustainable development. Caring for the Earth sees development, not staying within the carrying capacity of the earth,as the cause of environmental degradation. The approach towards solutions is to change attitudes and practices. The role of education is to provide knowledge and training, while advertising and entertainment should influence public opinion. Agenda 21 is based on the view that environmental degradation is caused by unsustainable lifestyles, values, and consumption and production patterns. The approaches towards solutions are seen in national awareness programmes towards sustainability. Education is expected to disseminate ecological, technical, scientific and legal knowledge.

Using film as one of his main fields of interest, Partha widened the focus of the Commission for new approaches. At the General Assembly in Perth (Australia, 1990) he had the name again changed: Commission on Education and Communication. At his personal

[47] With voluntary assistance from CEC member Dart Thalman; see also footnote 38.
[48] Partha writes about this: "With his own funds he set up a full-fledged office of the Commission with a qualified Bangalore-based Education Officer and staff". Partha then also started a series of CEC newsletters, Nature Herald.
[49] In one of his reports Naseeb Dajani, Education Officer in the Secretariat in 1983, mentions CEC National Committees in Australia, Argentine, Canada, Ireland, India, Nepal, China, Oman and Costa Rica. Most of them were merely Committees on paper. In the beginning of the nineties as a Deputy Chair Frits Hesselink could only trace substantial CEC activities in North America, East and South Africa and Europe. The North American Committee was led by Nancy Anderson. This committee provided support to set up an East African Environmental Network, providing funds for a regional meeting each year. Nathaniel Arap Chumo was one of the key leaders in this network.

initiative he instituted the IUCN CEC Tree of Learning Award for outstanding contributions to environmental education[50]. He continued as Chair until 1994. His most important legacy was raising funds from the Netherlands to give a new impetus to CEC[51]. Thanks to him CEC again had a future.

Dutch funding made it possible to have again secretariat and operational support for CEC in IUCN Headquarters[52]. For over 14 years Wendy Goldstein (Australia, 1945) managed with the help of Cecilia Nizzola-Tabja (Peru) the CEC network. Part of the 'deal' on the funding in 1990 between IUCN, the CEC leadership and the Dutch government was the appointment of Frits Hesselink (Netherlands, 1945) as CEC Deputy Chair (1990 - 1994)[53]. As deputy Chair he focused on organizational improvements of the CEC network management, the CEC regionalization into the South, relationships with regional offices and on linking education and communication with the emerging goals of sustainable development and interactive policy making. Wendy and Cecilia proved to be excellent network managers, tirelessly supporting the emerging voluntary networks and the CEC steering committee on its new course of regionalization and strategic planning of education and communication.

Wendy Goldstein; Cecilia Nizzola-Tabja; CEC coordinators in regional offices meeting in Gland 1996: Nargis Alavi, Ana Puyol, Susan Matindi, Jinie Dela, Cecilia Nizzola-Tabja, Lorena Aguilar; Jacquie Chenje; IUCN UNESCO Meeting on Strategic Planning for Ediucation and Communication: Victor Kotchekov (UNESCO), Liz Hopkins (IUCN), Frits Hesselink, Peter Bos (Netherlands); Marc Wilke (European Commission); CEC Steering Committee members and focal points in 1999: front row: Badri Pande, Juliana Chileshe, Mary Karanja, middle row: Ana Puyol, Susana Calvo, Dinh Thi Minh Thu, Mai Elrimisy, Aliou Faye, Jacquie Chenje, Angèle Luh Mbazoa, Susan Matindi, Jesús Cisneros, back row: Frits Hesselink, Abdelhamid H. Belemlih, Luis Artigas, Ziyad Alawneh, Moussa Batchily Ba.
Photos by Wendy Goldstein.

In Asia – under the leadership of Kartikeya Sarabhai - a regional network was formed called SASEANEE[54] and the secretariat for this network was undertaken by the Centre

[50] Recipients were among others Professor John Smyth, Al Gore and Kartikeya Sarabhai. The personal character of the CEC award implied that – also for the future – only Partha could decide to whom the prize would go. The award was therefore discontinued by his successor.

[51] Partha writes about this: "At a meeting of the IUCN Board, when Partha Sarathy reported the progress made in CEC, Drs. Jaap Pieters from the Netherlands, a senior member of the Board appeared impressed and offered to fund the CEC, if Partha immediately could produce a programme for the triennium with funding needs. This was done and approved by the Dutch Ministry of Agriculture, Nature Management and Fisheries. And shortly thereafter the CEC Secretariat was moved back to Gland".

[52] Joanna Boddens Hosang (Netherlands, 1958), assistant at the IUCN communication division, functioned initially as part time CEC coordinator at IUCN Headquarters from June 1991 until June 1992. She remembers that it was during this time that the CEC Newsletter Nature Herald was launched.

[53] In the Netherlands Jaap Pieters, Director Nature Management in the Ministry Agriculture, Nature Management and Fisheries was a pioneer in using education as an instrument for conservation policy. Internationally he supported the Education Commission by allowing Chris Maas Geesteranus – one of his staffs - to spend for many years a considerable amount of his time to work for the North West Europe Committee. Jaap Pieters was an IUCN Councillor from 1984-1994. He subsidized many international conservation initiatives, meetings and projects. Later this interest in education and communication by the Ministry was continued by Peter Bos, Senior International Policy Advisor.

[54] SASEANEE was launched in 1993 through a workshop attended by over 200 professionals from 16 countries. It was set up as a network of agencies involved in or interested in networking, initiating or supporting

for Environment Education in Ahmedabad, India. During the existence of the Network from 1993 to 2005, SASEANEE conducted a number of regional training programmes in education and communication for environment and development. Till date about 90 professionals from over 18 countries were trained under this initiative.
In Latin America also a new vibrant network ermerged[55].
In 1992 three European committees[56] met in Kranjska Gora, Slovenia, and held a travelling Conference on Education for Sustainable Tourism. In 1994 the three European CEC Committees, on the initiative of the regional CEC chairs Chris Maas Geesteranus and Jan Čeřovský, met in Jurmala, Latvia. There they merged and formed a new leadership[57] which brought the European network more in line with the global CEC programme. Cooperation then was sought with the CEEE (a network of teacher trainers in EE, who were holding regularly their **C**onference on **E**nvironmental **E**ducation in **E**urope) but this did not well come off the ground.

Launch of SASEANEE 1993 (photo by Wendy Goldstein), Latin American Network Meeting 1995 (photo by IUCN SUR), European Network meeting after merger in 1994 (photo CEC).

Notwithstanding the substantial Dutch support and emerging regional networks, the added value of CEC to the IUCN programme was unclear to headquarters and Council[58]. In 1993 IUCN undertook a review which had the explicit intent to axe the Commission. The Secretariat commissioned a small expert committee[59] to come up with a proposal. The assumption was that CEC was still working on conceptual frameworks for environmental education.

To its surprise the committee discovered in the investigation a new approach of strategic change, which clearly was of interest to the IUCN conservation strategies. Because of the recognition of the emerging new strategic direction[60] in CEC, the review recom-

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environmental education programmes. Major activities included information servicing, capacity building and material development. A biannual newsletter of SASEANEE was published with the aim to facilitate information sharing on significant EE events in the region. During 1993-2003, 9 volumes, with over 18 editions of the newsletter were published.

[55] A definite success factor of this network was the support from the IUCN regional office for South America and since 1995 a CEC focal point in the person of Ana Puyol (Ecuador, 1962).

[56] Between 1991 and 1994 a Southern European Committee functioned under the leadership of Susana Calvo but it played a modest role.

[57] Ueli Nagel, Monica Lieschke, Susana Calvo and Libby Grundy lead the transition in Europe to the new knowledge areas of strategic communication and ESD.

[58] In the first years of Dutch support the majority of these funds were used by the Secretariat to strengthen activities that had little or nothing to do with the education programme, e.g. the IUCN library, part of the salary of the director overseeing the education programme, the total budget of the Commission Operation Funds (for all Commissions) etc. It was one of the reasons for the Dutch government to seek for changes in CEC funding.

[59] The Committee consisted of former IUCN DG David Munroe, former CEC Deputy Chair Julia Marton-Lefèvre and outgoing CEC Chair M.A. Partha Sarathy.

[60] One of the authors remembers how surprised David Munroe was, when he visited the former's institute. He had expected to witness activities for children and listen to conceptual education jargon. Instead he met

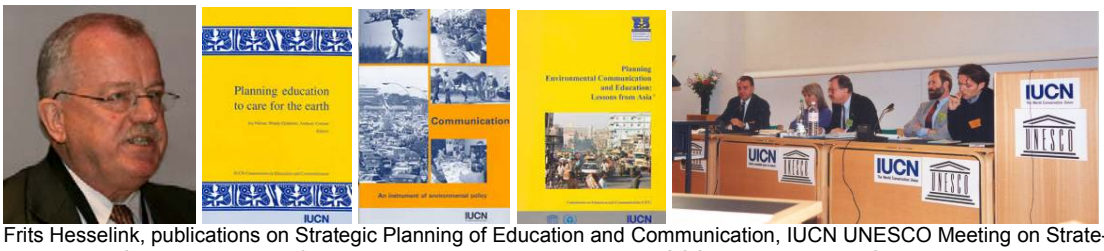
mended CEC not to be disbanded but to continue as an advisory body. This recommendation was not followed by the IUCN General Assembly. IUCN Members could not see the difference between an Advisory Body supported by the Secretariat and a Commission, supported by the Secretariat. Therefore they approved the CEC mandate for a full Commission, as proposed by the CEC steering committee.

Strategy Element	Stage 1 Reactive	Stage 2 Receptive	Stage 3 Constructive	Stage 4 Pro-active
Integrate	Extra curricular EE tools and activities in school programs	EE in curriculum of relevant subjects and in teacher training	School curriculum oriented towards sustainability	Culture of the autonomous school
Cooperate	EE and Biodiversity specialists	Curriculum developers and teacher trainers	Education authorities and suppliers of schools	Neighbourhood, private sector, NGO, parents
Generate	Ecological information	Environmental knowledge and attitudes	Conditions for change towards sustainability	Responsible citizens in a sustainable society

From	Towards
Facts	Perceptions
Science	Social change
Problems	Solutions
Publications	Actions towards change
Knowledge	Behavior
Silos	Integration
Supply	Demand
Product	Market
Captive audiences	Intermediaries and networks
Top-down	Top-down and bottom-up
One-way communication	Two-way communication
Focus on didactics	Focus on learning by doing
Focus on process and activities	Focus on impact

Images that lead to the advice of the reviewers not to abolish CEC but to keep it as a Strategic Advisory Committee

In the nineties components of IUCN focused increasingly on policy and capacity support for the Conventions on Biological Diversity, Ramsar, CITES and the ecosystem approach, creating tension with traditional programmes in forests, species and wetlands. Frits Hesselink once elected as Chair in 1994, made an effort to bring CEC back into mainstream IUCN. He focused the CEC programme on support to the work of IUCN in national conservation strategies. He saw the added value of CEC to IUCN in increasing the impact of conservation policies and practices through integrating learning and communication. In general he saw the market for CEC expertise in the articles of the environmental conventions, where governments commit themselves to invest in communication, education and public awareness[61].



Frits Hesselink, publications on Strategic Planning of Education and Communication, IUCN UNESCO Meeting on Strategic Planning for Ediucation and Communication: Victor Kotchekov (UNESCO), Liz Hopkins (IUCN), Frits Hesselink, Peter Bos (Netherlands); Marc Wilke (European Commission).
Photo by Wendy Goldstein.

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with more than two dozen consultants working with curriculum developers, schoolbook publishers and suppliers, the National Examination Board and six Ministries to bring about change towards sustainability in the formal education system. He was particularly impressed with the change management strategy behind the programme ("Sustainability as a Second Nature"). This strategy was i.e. summarized in some slides used at a CEC workshop during UNCED in Rio in 1992 and published as an article ("Strategic planning of environmental education and communication") in the CEC newsletter Nature Herald, 1993-II, pp. 6-7.

[61] Rio Declaration, Article 13 CBD, Article 6 UNFCC etc.), where governments commit themselves to invest in communication, education and public awareness. CEC Steering Committee member Jean Perras (Canada, 1946) formulated the mission of CEC with the words: Championing the strategic use of education and communication.

In a drive through three regional conferences on strategic planning of environmental education and communication in Europe[62] (1994), Latin America (1995) and Asia (1996) CEC knowledge and lessons learned were generated on the role of education and communication in governmental conservation strategies. Part of the instrument mix for governments to achieve environmental objectives. By focusing on one common global theme, new and vibrant regional networks emerged. CEC actively engaged in capacity building to support this approach, not only within the context of the IUCN programme, but also in the context of the Rio and other environmental conventions.
In Europe CEC started to play a major role in building communication capacity in accession countries states to the European Union for the Pan European Biological and Landscape strategy and Natura 2000.

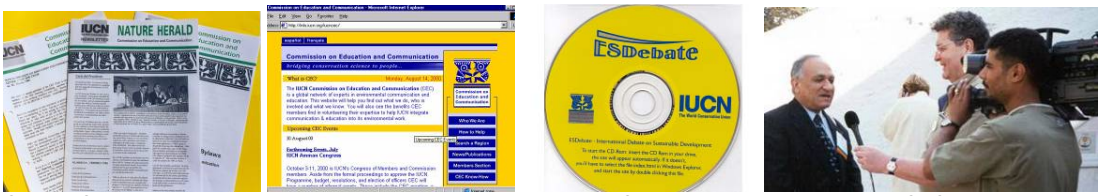
Uganda wetlands communication training (photo: Wendy Goldstein); SASEANEE Environmental Education training course (photo CEE India); PEBLDS & Natura 2000 communication capacity building programme, European Union Accession countries 1998-2003 (photo Wendy Goldstein).

Hesselink also broke with the idea that the Chair had to approve every individual member. In practice he delegated such to the regional chairs and the secretariat. He focused membership on experts with field experience, much more than on 'academics'.
New members were recruited among communication and learning experts from IUCN state and NGO members. This trend was to continue even more explicitly in the next decade. In practice this meant an end to the position and ambition of CEC as the global network for the conceptual discourse on Environmental Education[63]. Finally he changed the North American and European dominance in the CEC Steering Committee[64].
It was also the moment when CEC tried to harmonize membership of regional committees and that of CEC itself: a CEC member would automatically become a member of a regional committee.

By the end of the nineties the internet had become a major driver for change in the management of the CEC network[65]. The printed newsletter Nature Herald made way for electronic ones. CEC developed its first website and regional list servers. CEC experimented

[62] Not to be confused with the regional CEC meeting of NWEC and EEC in Jurmala, Latvia.
[63] In fact already in the eighties this role was more or less taken over by the NAAEE and the International Conferences on Environmental Education in Moscow, Thessaloniki and Ahmedabad or, more recently, initiatives such as the World Environmental Education Conferences.
[64] In practice this cultural change meant that for six years the CEC Steering Committee did not count any native speaker of English. From North America there was only one French speaking member (Jean Perras, Canada, 1945). Europe was represented by the Chair and one member from Spain (Susana Calvo).
[65] One of the authors remembers how revolutionary this was compared to the traditional ways of communicating in earlier decades. According to his recollection: "In a meeting in Nevada 1970 we desperately needed to contact a missing delegate from Pakistan. The secretariat of the meeting had to ask the NASA to facilitate a phone talk over their satellite! It took two days, but the delegate did arrive!"

with the first internet debates[66] and introduced the concept of knowledge management into IUCN[67]. The 1999 a CEC external review[68] recommended CEC to take the lead in IUCN in the field of knowledge management and organizational learning and start a virtual IUCN university[69].



Change from paper to electronic newsletters, on line communities of practice and video reporting (CEC member Ricardo Carvalho interviewing Parvez Hassan for the closing video of the IUCN World Conservation Congress in Amman)

In 1994 CEC had about 120 members. In 2000 there were over 600 members with a fair gender and regional balance. Despite all the changes there was still no real functional connection between the CEC knowledge network and the IUCN programme. The IUCN programme still had difficulty to see learning and communication expertise as disciplines needed to get conservation results[70]. And where the programme did so the programme leaders came with their questions at the end of a project or expected free consultancy services from a voluntary knowledge network, not asking for strategic advice. CEC had difficulties to find entry points into the IUCN programme to show its added value. So the pressure from the Secretariat for the Commission to "spread the messages" from IUCN's work[71] to the world continued.

2000s: Powering Change

In 2000 a much more coherent IUCN programme focused on a small number of key result areas. The idea of One Programme was introduced, meaning that Commission activities had to be part of the IUCN programme. New and innovative approaches were stimulated leading to IUCN initiatives on water, sustainable livelihoods and poverty. Denise Hamú (Brazil, 1959) was the first female Commission Chair in the Union (2000 - 2005). She was assisted by Susana Calvo (Spain)[72] as her Deputy Chair. Under their leadership a group of CEC members – among whom Sylvi Ofstad Samstag (Norway) and Peter Bos (Netherlands) - focused on impacting the policy environment. This way

[66] ESDebate, International Debate for Education on Sustainable Development, 1999.
[67] Workshop Knowledge Management during the Second World Conservation Congress, Amman 2000. The 1999 CEC review recommended CEC to take the lead in IUCN in the field of knowledge management and organizational learning and start a virtual IUCN university. This idea was later elaborated by Keith Wheeler and his colleagues into the World Conservation Learning Network.
[68] Bart Romijn, AidEnvironment, Amsterdam 1999.
[69] This idea was later elaborated by Keith Wheeler (USA, 1952) and Brad Smith (USA, 1945) into the World Conservation Learning Network.
[70] The IUCN programme had not a real vision on change, its implicit philosophy was that IUCN would generate and distribute knowledge and that such information in itself would lead to change at various levels.
[71] The Secretatiat expected from the CEC network plain public relations activities to 'get the IUCN messages' out. This also is reflected in the place where CEC was situated in the IUCN organization: sometimes under Programme, like the other Commissions; sometimes under Communication.
[72] Susana Calvo is a Chair of the Spanish National Committee for CEC which exists since the late eighties and was a Vice Chair for the Southern European Committee for CEC, which functioned between 1991 and 1994. Her Ministry sponsored many CEC activities for Spanish speaking countries.

CEC became an important actor in the interpretation of and realization of a work programme for an article on Communication, Education, and Public Awareness (CEPA) in the Convention on Biological Diversity[73].

Denise Hamú; Susana Calvo; Sylvi Ofstad; CEC brochures to lobby the Environmental Conventions: Mainstreaming Biodiversity, and Conservation Results by Managing Change.

CEC increased its profile in the inter-governmental sphere through active participation in the COP processes, on advisory committees and other major events to support the CBD as well as other environmental conventions and became recognized as the major CEPA knowledge network for the Secretariats of the Conventions and national governments[74].

One of the events that illustrated the changing paradigms in CEC was a conference in Valsaín in 2002, sponsored by the Spanish Government, and initiated by Susana Calvo. Its theme was Communicating the Environmental Conventions. This meeting positioned communication and education activities as change management instruments[75] to realize conservation results. For this meeting CEC members Dr. Miro Kline (Slovenia, 1946) and Frits Hesselink introduced – based on their experience with communicating Natura 2000 in Slovenia and other accession countries – a special case-study format to capture learning on the added value of communication in change processes[76].

It was also during this time that CEC demonstrated leadership in the area of Education for Sustainable Development (ESD). Daniella Tilbury (UK, 1967) was the first Thematic Chair for ESD and coordinated a range of initiatives which build international momentum in this area. IUCN CEC featured in major international dialogues leading to the World Summit on Sustainable Development held in Johannesburg in 2002[77]. CEC members mobilized support for the proposal to establish a UN Decade in Education for Sustainable Development. This energy resulted in UNESCO and other international organizations recognizing CEC as one of the most important 'portals' to the worldwide community of experts in ESD and environmental education and communication.

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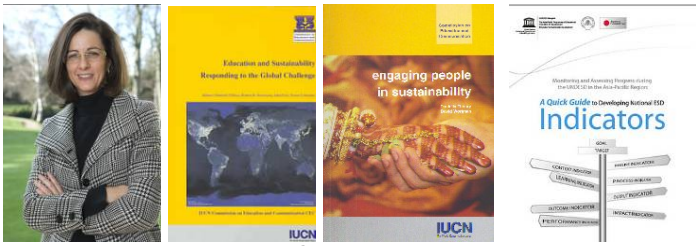
[73] Special mention has to be made of a small group of CEC members who worked tirelessly to negotiate – in a series of meetings since the end of the nineties - with SCBD and UNESCO on the formulation of a work programme for Communication, Education and Public Awareness (CEPA): Peter Bos, Susana Calvo, Elin Kelsey, Wendy Goldstein, Frits Hesselink, Sylvi Ofstad. Especially Peter Bos, Susana Calvo and Sylvi Ofstad played an important role, as they could speak on behalf of their governments on CEPA during official meetings and were able to influence decisions of COPs.

[74] With input of over 100 members, CEC developed for the CBD Secretariat a CEPA Toolkit in 2007.

[75] In a special brochure Conservation Results by Managing Change, the role of communication, education and public awareness, CEC tried to spread this vision.

[76] This format was used in the CEC publication Achieving Environmental Objectives and is still one of the most visited postings on the blog "The Art of Positive Change" (http://cepatoolkit.blogspot.com). The format has since been used in other CEC publications and training workshops.

[77] Shortly afterwards IUCN CEC became partner in the UBUNTU Alliance through an MoU with the United Nations University.



Daniella Tilbury, Education and Sustainable Development; Engaging People in Sustainability, A Quick Guide to Develop National ESD Indicators

By the time the Decade proposal was finally endorsed by the UN General Assembly in 2003, CEC members were already engaged in activities to help practitioners make sense of ESD in practice and develop processes to support the Decade.
CEC was successful in extending the ESD discourse beyond schooling to embrace informal learning, advocacy and communication activities[78]. It recognized that most conservation and environmental decisions were taken by adults who needed support and opportunities to learn about sustainable development[79].

Through its profile CEC was invited to sit at the table with other intergovernmental actors as they worked to affect policy at different levels. Like in previous post Tbilisi events CEC members were invited to shape the Tbilisi+30 conference through its steering committee, had an active role in a variety of workshops and provided input into the final declaration. In the Ahmedabad Declaration (2007) human production and consumption are seen as the drivers of environmental degradation while noticing that quality of life for some means deprivation and conflict for others. Approaches towards solutions are seen prevention and resolution of conflicts, respect for cultural diversity, the creation of a caring society and respect for the earth and its life support systems. The role of education is seen as a lifelong, holistic and inclusive process of partnerships, sharing and 'living the change'.

Since the turn of the century CEC members, among others Marco Encalada (Ecuador, 1942), Ana Puyol (Ecuador, 1962) and Marta Andelman (Argentina, 1950) were also key leaders in the Environmental Citizenship Project in Latin America, a project in partnership with UNEP and UNESCO.

[78] In 2003, CEC released 'Engaging People in Sustainability' (Tilbury and Wortman) which became CEC's most popular and sought after IUCN publication to date. The text is still considered a core text in Education for Sustainable Development and features in wikipedia as a defining publication. Independent data show that this is one of the most downloaded ESD published text and most cited in governmental policies as well as academic papers.
[79] CEC members engaged in ESD were focused on making a difference through ESD practice. In the mid 90s, CEC members took part in developing frameworks for tracking progress at the regional level. A joint UNESCO IUCN publication was realized in 2007 which helped government stakeholders take steps to advance sustainability in policy and practice and assess whether their efforts where actually making a difference. This document which offered indicators for monitoring and evaluating progress during the Decade was translated into Spanish and Japanese.

Ana Puyol; Marco Encalada; Marta Andelman, Public Participation in Argentina, Environmental Citizenship Project.

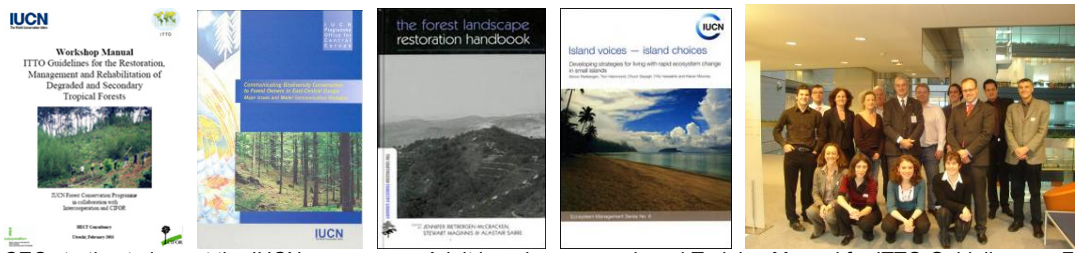
The turn of the century witnessed the global introduction of the second generation of interactive web utility, moving past static information-based web pages. CEC capitalized on this new technology through its existing members, and through an initiative to build a new sub-constituency within its membership of educators based in higher education institutions and universities. The World Conservation Learning Network was launched through this growing internal group, using new interactive online learning opportunities available globally for learning and professional updating[80].

Bill Jackson, Yolanda Kakabadse, Denise Hamú, Brad Smith, Huguette Labelle and Keith Wheeler at the launch of the World Conservation Learning Network Bangkok 2004 (photo by Wendy Goldstein), On-line course on Environmental Flow; Latin American version of the course; CEC Portal.

CEC experimented with a new interactive portal tailored to the needs of the users and equipped with tools for on line surveys and other knowledge management features. These examples which were soon followed by other parts of IUCN. In the same way training expertise, demand articulation skills, survey expertise, facilitation techniques and capacities showcased by CEC were increasingly making their way into IUCN programmes[81]. More and more the IUCN programme is starting to use CEC expertise.

[80] CEC introduced IUCN to the concept of e-learning through a course on environmental flow (WANI). In 2005 Keith Wheeler, Frits Hesselink and Corli Pretorius, CEC focal point at the time, wrote a white paper for the Secretariat 'Redefining Capacity Building for the 21st century, as the guiding vision for IUCN on capacity building and learning for greater impact and change.

[81] At the 2004 Bangkok WCC CEC members helped structure and facilitate workshops and meetings of other Commissions and programmes. Other IUCN component programmes, e.g. forest, water, ecosystems, business asked CEC members and support staff to advise on the learning or communication aspects of their projects. As the capacity building approach of CEC always has been one of 'learning by doing', the immediate credits of this support to projects and publications never went to CEC. The CEC influence undoubtedly has been a success factor for these IUCN programmes. At the same time the absence of such credits often puts CEC in the position that it constantly has to prove its added value.



CEC starting to impact the IUCN programme: Adult learning approach and Training Manual for ITTO Guidelines on Forest Landscape Restoration, Professional updating on Communicating Biodiversity to Private Forest Owners, Demand Articulation for Forest Landscape Restoration Handbook, Web based Training Needs Assessment on Island Ecosystems, Focus group with hotel managers to develop Biodiversity Guidelines (photo ACCOR).

By the mid 2000's and the wealth of knowledge that lies at each individual's fingertips, attention has turned again to communication and learning, and their role in the behaviour change needed for societies to use the information and knowledge available for action. The current CEC Chair Keith Wheeler is taking the development of CEC to the next level by focusing on change processes and the realization that facilitating partnerships[82] is vital to cope with change. From mid 2005 the Commission is supported by a secretariat[83] headed by Gillian Martin-Mehers (USA, 1963).

Keith Wheeler, Gillian Martin-Mehers, International Workshop Exploring Deep Change Processes, 2006; Exploring New Modalities of Web Based Learning for the Arab Region, Alexandria, 2007.

In the fast-paced, dynamic environment in which IUCN and the conservation community find themselves, CEC positions itself as the knowledge network for creating strategic communication platforms, leveraging new learning for professional development and facilitating the co-creation of sustainable solutions[84]. The focus is on new interactive technologies, the next phase and operationalisation of the World Conservation Learning Network; and on dialogue and consensus-building processes that help stakeholders move past knowledge to action. CEC continues to evolve responding to the changing world, the strengths that its chairs, governance committees and members bring, seeking to contribute to the work of IUCN as it works towards achieving its vision: "A just world that values and conserves nature."

[82] Through a MoU with the United Nations University and IUCN, WCLN became the platform for the IUCN Institute to develop accredited post graduate courses on natural resource management and sustainability.
[83] Gillian Martin-Mehers is currently supported by Elisabeth Crudgington, Nicole Thonnard-Voillat and Cecilia Nizzola-Tabja. Gillian was previously a CEC Vice Chair for Europe and a CEC member since the early nineties. Since 1996 she played an important role in helping to facilitate CEC strategic planning meetings.
[84] The current CEC strategic plan sees unsustainable practices, conflicts, disasters and inequity as the cause of environmental degradation. Approaches towards solutions are based on the creation of a climate for change by overcoming silo-thinking, facilitating participation processes and addressing inadequate access to relevant professional knowledge. The role of education and communication is to facilitate the co-creation of sustainable solutions; to create strategic communication platforms; and to leverage new learning for professional development.

Epilogue

Since 1948 CEC is the leading global network to co-create, manage and broker knowledge in learning, communication and participatory processes for the conservation and sustainable use of biodiversity. Over time CEC has helped the IUCN programme, members, commissions and partners to learn to change for the future. To build public support for positive change in conservation and sustainable development. CEC brings to the conservation community cultural, targeted and facilitated approaches and tools for learning and participation. Using the latest professional insights, methods and media.

Over the last sixty years CEC developed from a formal advisory body to the IUCN Council on conservation awareness to a socio-scientific – Northern dominated - network developing and elaborating conceptual frameworks for environmental education. And finally to a global knowledge network on social instruments for change: learning, strategic communication and knowledge management. Writing this history three questions arise:What is the value of a Commission? And in particular of CEC? What are lessons for the future?

A Commission network enables the IUCN programme to have a direct impact on the daily professional activities of thousands of committed individual experts in a range of disciplines all over the world. In doing so it multiplies the IUCN vision, mission and programmatic messages far beyond the reach of the IUCN formal communication to its organizational members and the public. In return the IUCN programme gains access to relevant peer reviewed knowledge far beyond the possibilities of the worldwide web and informal professional knowledge networks. The network enables Commission members gain inspiration from others, new ideas and new learning. Knowledge products and activities of a Commission benefit IUCN and the wider conservation community.

CEC brings vital knowledge to IUCN as technical and scientific information alone does not lead to change. And transformational change is needed at many levels in society to contribute to the conservation and sustainable use of biodiversity. To be relevant for IUCN, CEC should increasingly focus on the ‘chemistry’ of such change: how to frame the discourse, how to facilitate partnerships and how to manage individual, organizational and social learning processes.

Strategic planning of a Commission’s mandate and thus its added value to IUCN, prevents a Commission from becoming an ‘old boys network’ and a bureaucracy in itself. Especially when the Commission leadership also realizes the appropriate change in Commission membership and programmatic focus. Much can be won when knowledge can stream directly between CEC, component programmes, other Commissions and IUCN members. Sufficient support to the Commission – through engaging CEC in time, and providing sufficient resources – is vital to make such knowledge stream optimally so that the IUCN programme can benefit and can increase its impact. CEC has demonstrated that it is best placed to experiment with new approaches to building social capital and new knowledge management modalities for conservation.

Annex 1. Glossary and acronyms

CBD – Convention on Biological Diversity

CEC – IUCN Commission on Education and Communication

CEESP – IUCN Commission on Environmental Economics and Social Policy

CEL – IUCN Commission on Environmental Law

CEM – IUCN Commission on Ecosystem Management

CEPA – Communication, Education and Public Awareness, acronym used in the environmental conventions for the range of social instruments that can be used to support their implementation at the national and local level.

CITES – Convention on the International Trade in Endangered Species

Communication - Communication is an activity in which a sender transmits a message, with or without the aid of media and vehicles, to one or more receivers, and vice versa. The way in which communication takes place is referred to as the communication process. The ideal form of communication is a two way process aimed at mutual understanding, sharing of values and action. For governments the two-way exchange of information is a means to gain cooperation of groups in society by listening to them first and clarifying why and how decisions are made. In an instrumental approach governments use communication with other instruments to support biodiversity conservation to address economic constraints and to motivate action. Governments also use one-way communication to inform audiences about policies and legislation[85].

COP – Conference of the Parties to a Convention

ECEE – European Committee for Environmental Education, established in 1994 by merging of the three existing European (sub) regional committees of CEC

EduC – Acronym for IUCN Commission on Education, the first name of CEC

Education – Education is the guiding of learning processes in the form of instruction, experiencing or setting examples. Formal education is the hierarchically structured, chronologically graded educational system running from primary through the tertiary institutions. Non formal education activities are organized educational activities outside the established formal system, intended to serve an identifiable learning clientele with identifiable objectives. Informal education is the process whereby every individual acquires attitudes, values, skills and knowledge from daily experience, such as family, friends, peers and media. Education is a set of processes that can inform, motivate and empower people to support biodiversity conservation, not only by making lifestyle changes, but also through promoting change in the way that institutions, business, and governments operate[86].

[85] From the CEPA Toolkit Glossary: www.cepatoolkit.org
[86] From the CEPA Toolkit Glossary: www.cepatoolkit.org

EE - Environmental Education refers to the overall field of education which engages learners with their environments, be they natural, built or social. The range of practices and approaches to Environmental Education have evolved significantly since the term was first used in the late 1960s. Initially in the 1970s educators perceived Environmental Education as 'education about the environment' which focuses on developing knowledge and understanding. Environmental Education then progressed to favour the approach of 'education for the environment' emerged as a dominant force with its focus on participation and action to improve the environment. Currently within Environment Education one can still find examples of all these approaches in practice. The most recent development in Environmental Education theory and practice is 'education for sustainability'. This approach challenges current practice in several ways to achieve more systemic change towards sustainability[87].

EEC – East Europe Committee, established 1967, the second regional committee of CEC

EEP – East Europe Programme of the IUCN, launched at the IUCN GA in San Josė, Costa Rica, with the aim to strenghten the development of nature conservation in Central and Eastern Europe through support from IUCN.

ESD – Education for Sustainable Development has crystallized as a result of international agreements and the global call to actively pursue sustainable development. It provides a new orientation for current practice in Environmental Education. This new orientation attempts to move beyond education *in* and *about* the environment approaches to focus on equipping learners with the necessary skills to be able to take positive action to address a range of sustainability issues. Education for sustainability motivates, equips and involves individuals, and social groups in reflecting on how we currently live and work, in making informed decisions and creating ways to work towards a more sustainable world. Underpinned by the principles of critical theory, education for sustainability aims to go beyond individual behaviour change and seeks to engage and empower people to implement systemic changes[88].

IEEP – International Environmental Education Programme, a ten year program of activities of UNESCO and UNEP Has been prepared by meetings in Belgrade 1975 and Helsinki in 1976 and endorsed by the UNESCO/UNEP Intergovermental Conference on Environmental Education, a high international event held in Tbilisi (Georgia, former USSR) in October 1977. The outcomes have been reviewed and further perspectives outlined by the International Congress on Environmental Education and Training (“Tbilisi plus 10”) in Moscow in 1987.

IUCN – International Union for the Conservation of Nature and Natural Resources

IUCN Council – Governing Body of IUCN in between two World Conservation Congresses/General Assemblies

[87] Definition by CEC member Daniella Tilbury in http://www.aries.mq.edu.au/portal/about/glossary.htm
[88] Definition by CEC member Daniella Tilbury in http://www.aries.mq.edu.au/portal/about/glossary.htm

IUCN GA – IUCN General Assembly

IUCN WCC – IUCN World Conservation Congress

IUPN – International Union for the Protected of Nature, original name of IUCN as it was founded in 1948 in Fontainebleau, France

IYF – International Youth Federation for Environmental Study and Conservation, founded in 1956 in West Europe, gradually spreading globally, until 1984 the junior arm of IUCN. At present, a project concerning the compilation of a book on the history of IYF is being launched

NAAEE – North American Association for Environmental Education

Natura 2000 - Natura 2000 is an ecological network in the territory of the European Union. In May 1992, governments of the European Union adopted legislation designed to protect the most seriously threatened habitats and species across Europe. This legislation is called the Habitats Directive and complements the Birds Directive adopted in 1979. These two Directives are the basis of the creation of the Natura 2000 network.

Nature Herald – CEC Newsletter 1991-1996

NWEC – North West European Committee, oldest regional committee of CEC

PEBLDS - Pan European Biological and Landscape Diversity Strategy

Public Awareness - Public Awareness brings the issues relating to biodiversity to the attention of key groups who have the power to influence outcomes. Awareness is an agenda setting and marketing exercise helping people to know what and why this is an important issue, the aspirations for the targets, and what is and can be done to achieve these[89].

Public participation - Public participation is an approach for governments, organizations and communities around the world to improve their decisions by involving those people who are affected by those decisions[90].

Ramsar – Convention for the conservation of wetlands

SASEANEE – South Asian and South East Asian Network for Environmental Education

Social Instruments - Social instruments for the implementation of policy for sustainable development include those related to issues such as partnerships, self-regulation (e.g. environmental auditing and ISO 14000), information related measures (e.g. eco-labelling), and awareness raising (e.g. publicity and environmental education). These instruments are intended to alter behaviour patterns, as well as to build capacity for sustainable development, through the establishment of social relationships or networking (or social pressure and social commitments). Awareness raising and information produce individual incentive and the ability to take appropriate decisions. Participation and part-

[89] From the CEPA Toolkit Glossary: www.cepatoolkit.org
[90] From the CEPA Toolkit Glossary: www.cepatoolkit.org

nerships create organisational ability with the view to sustainable development. Civil society that incorporates these instruments would be a driving force behind changes in consumption and production patterns, and would involve bodies that affect government decision making. Thus, the role of these instruments is increasing in importance, while the causes of environmental problems become even more complex and expand worldwide[91].

SSC – IUCN Species Survival Commission

UNCED – United Nations Conference on Environment and Development (Rio de Janeiro Brazil 1992)

UN Decade - In December 2002, resolution 57/254 was adopted by the United Nations General Assembly establishing the United Nations Decade of Education for Sustainable Development (2005-2014). The Decade is a culmination of the momentum towards sustainability generated by the Earth Summit, 'Agenda 21' and the WSSD and presents an opportunity to focus world attention on education for sustainability across the globe. The United Nations Decade of Education for Sustainable Development aims to:

- promote education as a prerequisite for the movement to sustainable human societies;
- integrate sustainable development into education systems at all levels; and
- strengthen international cooperation towards the development and sharing of innovative education for sustainable development theory, practice and policy.

The Decade also offers opportunities for researchers, practitioners and education policymakers, who are often isolated from each other, to join in partnerships and to contribute to a collective and international imperative[92].

UNESCO – United Nations Educational, Scientific and Cultural Organization , founded in November 1945, is the United Nations organization for the promotion of international cooperation in education, science, culture and communication in 193 Member States and 6 Associate Members. It has always paid a great attention to nature, environment and conservation. In 1948 UNESCO was instrumental in constituting the IUCN with which it has permanent close cooperation. It started a global action by the Biosphere Conference in Paris 1968 which started the intergovernmental international Man and Biosphere Programme. The seat of UNESCO is in Paris, France.

UNEP – United Nations Environment Program, - established as an outcome from the UN Stockholm Conference in 1972 is a specialized United Nations agency to provide world leadership and encourage international partnership in caring for the environment, thus urging and encouraging nations and peoples to improve their quality of life. UNEP has its seat – as the first big UN agency in the South, in Nairobi, Kenya. The present UNEP Executive Director is the UN Under-Secretary Achim Steiner (Germany), a former IUCN Director General.

UNFCC – United Nations Framework Agreement on Climate Change

WCC – IUCN World Conservation Congress

[91] Institute for Global Environmental Strategies, Research on Innovative and Strategic Policy Options
[92] Definition by CEC member Daniella Tilbury in http://www.aries.mq.edu.au/portal/about/glossary.htm

WCLN – World Conservation Learning Network

WCPA – IUCN World Commission on Protected Areas

WCS - World Conservation Strategy; IUCN has published two global strategies regarded as the top achievements of its activities during the whole of its history. The first one, entitled “World Conservation Strategy, Living Resource Conservation for Sustainable Development” was prepared during late 1970s, launched and published 1980. The more detailed second one “Caring for the Earth, A Strategy for Sustainable Living” is from 1991. Both documents have been prepared and published in partnership with UNEP and WWF.

WSSD – World Summit on Sustainable Development (Johannesburg, South Africa, 2002)

WWF – Worldwide Fund for Nature is a large international conservation organization with a mission to preserve the diversity and abundance of life on Earth and the health of ecological systems. It is active in more than 100 countries of the whole world, currently implementing over 1,300 projects, many of them in the field of education and communication. The organization was founded as the fund raising arm of IUCN by the “Morges Manifesto” in 1961 in Morges, the first Swiss seat of IUCN. Both IUCN and WWF have been living and working closely together until 1992 even sharing common buildings in Gland, the second Swiss home town of IUCN, where both organizations still have their headquarters.

Annex 2. CEC Publications

The following are Commission publications published by IUCN, or publications published by or in partnership with others, in which Commission members had a major input, as part of their Commission work.

1950-1559

A guide to teaching happy living through conservation, A guide to Conservation, Palmer, E. Laurence, IUPN 1953

Protégez aujourd'hui le monde de demain, Protect tomorrow's world today (multi-media package including a film 'Cherish the hand that feeds us', about population growth and nature conservation), IUPN/UNESCO 1955

1960-1969

World conservation education: papers presented at the Workshop on Conservation Education held at Nairobi, Kenya, on 12-13 September 1963, IUCN Commission on Education, Morges, Switzerland, 1965.

Conservation education at the university level: papers presented at the Symposium on Conservation Education held at Lucerne, Switzerland, 23-24 June, 1966, IUCN Commission on Education; Unesco - Morges : IUCN, 1967

Conservation education and training: papers presented at the Conference on Conservation of Nature and Natural Resources in Tropical South-East Asia, held at Bangkok, Thailand, 29 November - 4 December 1965, IUCN Commission on Education - Morges : IUCN, 1968

Conservation education: papers presented at the Latin American Conference on the Conservation of Renewable Natural Resources, held at Bariloche, Argentina, 27 March - 2 April 1968, IUCN Commission on Education - Morges : IUCN, 1968

Konferenz des Osteuropaeischen Kommittees der Kommission fuer Erziehung (IUCN), Report, Berlin - DDR, 1968

1970-1979

IUCN Education Newsletter. IUCN Commission on Education, Jan Čeřovský ed. – 8 issues, IUCN Morges, 1969-1972

Environmental conservation education problems in India: proceedings of the Working Meeting of the IUCN Commission on Education, held at Forest Research Institute and Colleges, Dehra Dun, India, 21-22 November 1969, IUCN Commission on Education - Morges : IUCN, 1970.

International Working Meeting on Environmental Education in the School Curriculum. Final Report from IUCN-UNESCO Seminar. Foresta Institute for Ocean and Mountain Studies, Carson City, Nevada, USA, 1970

Environmental conservation education among populations of rural and woodland areas, Čeřovský Jan, ed. ; Pritchard, Peter C.H., ed. - IUCN Commission on Education ; Unesco - Morges : IUCN, 1971.

Vorträge aus der III Konferenz des Osteuropäisches Komitees der Komission für Erziehung der IUCN (29.IX. – 3.X. 1970). Conference Proceedings. Semizdat, Sofia, Bulgaria, 1971

Environmental education in an urban society: proceedings of the ninth Regional Conference of the North-West Europe Committee, Commission on Education, IUCN, held at Rotterdam, Netherlands, 30 August - 5 September 1971, Goudswaard, J., ed. - IUCN Commission on Education, North West Europe Committee ; Netherlands, Ministry of Cultural Affairs, Recreation and Social Welfare - Morges : IUCN, 1972

European Working Conference on Environmental Conservation Education, Final report, Rüschlikon near Zürich, Switzerland, 15-18 December 1971, Čeřovský, Jan, ed. ; Withrington, David, ed. - IUCN Commission on Education - Morges : IUCN, 1972

Environmental conservation education in the school curriculum in East European countries : proceedings and documentation, International Seminar of the East-Europe Committee, IUCN Commission on Education, Kroscienko-Szczawnica, Poland, 22-28 June 1972, IUCN Commission on Education, East Europe Committee; Poland, State Council for Conservation of Nature - Morges : IUCN, 1973.

The impact of an industrial area in a natural setting: proceedings, Johnson, Carol, ed. - IUCN Commission on Education ; Council for Environmental Education - Reading, UK : Published by the Council for Environmental Education [for IUCN], 1975.

Multilingual Dictionary of Conservation Terms. Compiled by a group lead by Lev K. Shaposhnikov, Chair of the IUCN Commission on Education. – IUCN Morges, 1976

Handbook of environmental education with international case studies, Saveland, Robert N., ed. - IUCN - London : J. Wiley & Sons, 1976.

Le grand livre de la montagne et de la forêt: pour une éducation écologique, Thomas, Guy, ed. - IUCN - Bâle: Editions Académiques, 1979

1980-1989

IUCN Commission on Education : **annual reports of members** 1980, IUCN Commission on Education - [Gland: IUCN], 1980

IUCN Commission on Education : **annual reports of members** 1981, IUCN Commission on Education - Gland : IUCN, 1981

IUCN Commission on Education, East Europe Committee - Pec Pod Snezkou, CS : **Report from the meeting of the East-Europe Committee of the IUCN Commission on Education,** East Europe Committee of the IUCN Commission on Education, 1982

Tallin Declaration on „Fine Arts and Photography as Tools in Nature Conservation". Conclusion from international meeting of the EEC, IUCN Commission on Education, Tallin, Estonian Republic, 1983

Environmental education about the rain forest, Berkmüller, Klaus ; Torres, Hernán, translator - IUCN ; WWF - Ann Arbor, MI : Wildland Management Center, School of Natural Resources, University of Michigan, 1984

A guide to environmental administration in-service training, IUCN Commission on Education ; UNEP - Gland : IUCN, 1984

Introducción a la Estrategia Mundial para la Conservación, IUCN Commission on Education ; UNEP ; Instituto Mexicano de Recursos Naturales Renovables - Gland : UICN, 1984

An introduction to the World Conservation Strategy, IUCN Commission on Education ; UNEP - Gland : IUCN, 1984

Annotated list of Environmental Education Centers in Europe, by Enikö Szalay-Marzsó, a joint project of the NWEC and EEC of the IUCN Commission on Education, Budapest, Hungary 1985

Nature conservation in the socialist countries of East Europe, Čeřovský, Jan - IUCN Commission on Education, East Europe Committee - Vrchlabí : Published by the Administration of the Krkonose (Giant Mountains) National Park, 1986

World Conservation Strategy : a programme for youth : manual for youth environmental programmes, Berkmüller, Klaus ; Monroe, Martha C. - IUCN Commission on Education ; UNEP ; International Youth Federation - Gland : IUCN, 1986

Youth in environmental action : an international survey, Voordouw, Jan J., ed. - UNEP ; IUCN ; International Youth Federation - Gland : IUCN, 1987

Nature conservation in the socialist countries of East Europe, Cerovsky, Jan - IUCN Commission on Education, East Europe Committee - Praha : Ministry of Culture, 1988

New ideas in environmental education, Briceño, Sálvano ; Pitt, David - European Communities, Commission ; IUCN - London : Croom Helm, 1988

1990-1999

Nature Herald, Commission on Education and Communication Newsletter, 1991 - 1995

Environmental education in Nepal : a review, Nepal, National Conservation Strategy Implementation Programme ; Nepal, National Planning Commission; IUCN - Kathmandu: National Conservation Strategy Implementation Programme; National Planning Commission, 1991

IUCN Commission on Education and Communication: a guide for members, IUCN Commission on Education and Communication - Gland: IUCN, 1991

Walia : the approach. Practical guidelines [for] schools environmental education project, Roy, Nicole Du - IUCN, Sahel Programme - Gland: IUCN, 1991

Environmental education about the rain forest, Berkmüller, Klaus - IUCN, Forest Conservation Programme - Gland: IUCN, 1992

Educating for Sustainable Tourism. Conference Proceedings – 3 European Regional Committees of the IUCN Commission on Education and Communicaton. Edited by Enikö Szalay-Marzsó, Rosa Cintas Serrano, Chris Maas Geesteranus, Barbara James, John Baines and Boštjan Anko. – University of Ljubljana, 1992

The NCS communication and education strategies, Strategy Development Meeting, Karachi, September-October 1992 : report, IUCN, Journalists' Resource Centre ; IUCN Pakistan, Education Unit - Karachi : IUCN Pakistan, 1992

Towards strategies for education and communication for biodiversity and sustainable living by Wendy Goldstein in: Report Symposium Education and Science for Maintaining Biodiversity - An International Symposium Basle, Swiss Academy of Sciences and Swiss National Commission for UNESCO, 1992

National Strategies for Environmental and Development Education Europe, IUCN-UNESCO Meeting Report, November 1994, IUCN Commission on Education and Communication, Edited by Peter Hulm, Gland, Switzerland,1995

Planning Environmental Education in Europe, Reports of two meetings: Bergen (1993) and Jurmala (1994), European Committee for Environmental Education**,** IUCN Commission on Education and Communication, Edited by John Baines and Stephen Sterling, Gland, Switzerland, 1995

Communicating conservation : a prescriptive study, Najam, Adil - Pakistan, Environment and Urban Affairs Division ; IUCN Pakistan - Karachi : IUCN, 1995

Educando para la conservación de la vida silvestre, Morales, Nydia E. - IUCN, Regional Office for Meso-America ; Norway, NORAD - San Jose : IUCN ORMA, 1995

Rekindling the Embers, video by members of the East African Committee of CEC, IUCN Commission on Education and Communication, Nairobi, Kenya, 1995

Planning education to care for the earth, Palmer, Joy, ed. ; Goldstein, Wendy, ed. ; Curnow, Anthony, ed. - IUCN Commission on Education and Communication ; IUCN ; Denmark, Danida ; UNEP - Gland : IUCN, 1995

Reviving links: NGO experiences in environmental education and peoples' participation in environmental policies, Hemert, Mieke van ; Wiertsema, Wiert ; Yperen, Michiel van - Both ENDS; IUCN Commission on Education and Communication; SME MilieuAdviseurs - Amsterdam, 1995

Biodiversity Education and Communication - Report of the European Committee for Environmental Education Workshop held in Valsaín, Spain, Edited by Uli Nagel, Wendy Goldstein and Cecilia Nizzola-Tabja, 1995

Planning environmental education: A step or a stride? Compilation of introductions and lectures of two conferences, Bergen (1993) and Jurmala (1994), Edited by Chris Maas Geesteranus, European Committee for Environmental Education**,** IUCN Commission on Education and Communication, Gland, 1995

Communication, an instrument of environmental policy, Agnes Gomis and Frits Hesselink, IUCN Commission on Education and Communication, Gland 1996 (also translated into French and Spanish)

Reunión sobre gestión de programas nacionales de educación y comunicación para el ambiente y el desarrollo en América Latina : memorias, Puyol, Ana ; Cuvi Sánchez, María, ed. - IUCN Commission on Education and Communication ; IUCN, Regional Office for South America ; Unesco – Quito, 1996

Sistematizaciòn de Experiencias de Educación Ambiental, PROBONA/UICN-CEC/FTPP-FAO, IUCN Commission on Education and Communication, IUCN Regional Office for South America, Quito, 1996.

Education and Communication: Tools for Sustainable Development, IUCN Commission on Education and Communication, Edited by Wendy Goldstein, Gland Switzerland, 1996

Expert meeting to structure information and communication for the Pan European Biological and Landscape Diversity Strategy, Scheveningen, Netherlands, Edited by Wendy Goldstein, IUCN Commission on Education and Communication, Gland, Switzerland, 1997

The Oceans, Special Edition of *Connect UNESCO International Science, Technology and Environmental Education Newsletter. Vol. XXII No 3-4* pp.32 English, French, edited by Wendy Goldstein, 1997

Public education, Boulton, Mark - Ghana, Wildlife Department ; IUCN - Accra : Wildlife Department, 1997

Education and communication to conserve biodiversity in Sri Lanka, Dela, Jinie - IUCN Sri Lanka, Education and Communication Programme - Colombo : IUCN Sri Lanka, 1998

Planning Environmental Communication and Education: Lessons from Asia, IUCN, Commission on Education and Communication CEC, UNESCO & UNEP, Edited by S. Saaed, W. Goldstein and R. Shrestha, 1998

Training Manual for Effective Communication for Biodiversity Conservation, 20 modules, by Frits Hesselink, Rutger Jan Schoen, and Wendy Goldstein, IUCN CEC, Utrecht Netherlands,1998

Public Education and Awareness, How to put it into practice, Article 13 of the Convention on Biological Diversity, Report of a Global Biodiversity Forum Workshop, Bratislava 1998, IUCN Commission on Education and Communication, Edited by Wendy Goldstein, Gland, 1999

Public Education and Awareness Case Studies, brochures edited by Wendy Goldstein, IUCN CEC Gland, 2002:

- Checklist on Education Projects for the Parties to the Convention on Biological Diversity;
- Teachers in Charge: Environmentalising the School Curriculum;
- Community Involvement in Marine and Coastal Management: Australia's Marine and Coastal Community Network;
- Communication between farmers and government about nature De Peel region, the Netherlands: a new approach to policy development.

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European Expert Meeting on Sustainable Development and Environmental Education, Soesterberg, Netherlands, 1999, Conference Report, IUCN Commission on Education and Communication; Dutch Commission for Sustainable Development, Hesselink, Frits, ed. ; Kempen, Peter Paul van, ed. Amsterdam 2000

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La educación ambiental y la educación indígena en Costa Rica : perspectiva histórica y opciones actuales, Vargas Mena, Emilio - IUCN, Regional Office for Meso-America ; Costa Rica, Ministerio de Recursos Naturales ; Universidad Estatal a Distancia, Programa de Educación Ambiental ; Universidad Nacional, Programa Regional en Manejo de Vida Silvestre para Mesoamérica y el Caribe - San José, CR : UICN ORMA, 2000.

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WCC Closing Video, capturing the main events and spirit of conservation by participants in Amman, giving an overview of IUCN in action and providing a good take home feeling, video by Ricardo Carvalho, Amman Jordan 2000

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Ambiente y Desarrollo Sostenible, Herraminertas de capacitacion, IUCN SUR, IUCN Commission on Education and Communication, Quito, Ecuador, 2001

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Mainstreaming Biodiversity, CEC video for the Convention on Biological Diversity COP6 shown during plenary session The Hague to argue the importance of communication and show the importance of impacting on feeling, video by Ricardo Carvalho

Report of the IUCN Workshop on Strategic Communication for the Brazilian Ministry of Environment, Ecom, HECT Consultancy, IUCN Commission on Education and Communication, Rio de Janeiro, 2002

Em busca de uma estrategia de educacao e difusao da Agenda Marrom, Ministeria do Meio Ambiente, Secretaria de Qualidade Ambiental nos Assentamentos Humanos, Ecom, HECT Consultancy, IUCN Commission on Education and Communication, Edited by Ricardo Carvalho and Frits Hesselink, Brasilia, 2002

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Workshop Manual for training in public participation for Asian Biodiversity Planners, by Frits Hesselink and Dunmai Cowasjee, Bangkok, Thailand, 2002

Diversidad Biologica y Participacion, Andelman, M, IUCN SUR, Quito Ecuador, 2002

Nature Conservation in Partnership – Lessons learned in communicating biodiversity, Report of the IUCN ECEE International Workshop – Fertö-Hanság National Park Hungary, Edited by Wendy Goldstein, November 6-8 2002

Education and sustainability: responding to the global challenge, Tilbury, Daniella, ed. ; Stevenson, Robert B., ed. ; Fien, John, ed. ; Schreuder, Danie, ed. - IUCN Commission on Education and Communication - Gland : IUCN, 2002

Workshop Manual for training in strategic communication for IUCN Asia staffs, by Dunmai Cowasjee and Frits Hesselink, Karachi, Pakistan, 2002

The Role of Communication, Chapter 18 by Jinie Dela, Dunmai Cowasjee and Wendy Goldstein in *Biodiversity Planning in Asia, Review of National biodiversity Strategies and Action Plans,* Carew-Reid, J., Ed., IUCN, Sri Lanka, 2002

Conservation Results by Managing Change, the role of communication, education and public awareness, Gwen van Boven and Frits Hesselink, IUCN Commission on Education and Communication, Gland 2003 (also translated into French and Spanish)

A promise to new Generations, CEC video shown for Environment Ministers of the Americas commissioned by Environment Canada, video by Ricardo Carvalho, 2003

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Global Perceptions of Conservation and Sustainable Development, **A Survey**, Frits Hesselink (Ed.), IUCN Commission on Education and Communication, Gland 2003

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Towards Environmental Education for Sustainable Development: The contributions of NGOs in the Asia-Pacific Region, by D. Tilbury, W. Goldstein and L. Ryan in: *International Review for Environmental Strategies,* Vol.4. No.1, pp 59-73, Institute for Global Environmental Strategies, 2003

Enabling eco-action : a handbook for anyone working with the public on conservation, Robinson, Les ; Glanznig, Andreas - IUCN Commission on Education and Communication ; Humane Society International, AU ; WWF-Australia - Sydney, NSW : Humane Society International, 2003

Voices Beyond Boundaries, CEC video by Ricardo Carvalho, shown during the plenary of the World Parks Congress WPC Durban to emphasize the need to use communication as a tool for PA management, 2003

Water to Drink – CEC video record of a performance on the role of communication in protected area management developed by CEC members and actors from Southern Africa filmed by Ricardo Carvalho at the exhibition centre at the Parks Congress, 2003

Perception is the only reality - Report of a quick scan among major CEC external stakeholders by Frits Hesselink, Gland Switzerland, 2003

IUCN Conservation Learning Network – Report of and internal IUCN workshop, Commission on Education and Communication, Edited by Wendy Goldstein, Gland, Switzerland, 2003

IUCN conservation campaigns at Campaigning for Zoos and Conservation, by Wendy Goldstein in Report of IVth International Conference on Zoo Marketing and Public Relations; EAZA and WAZA – World Association of Zoos and Aquariums, Budapest Zoo, 2003

Voces para un diálogo de futuro : el debate sobre desarrollo sostenible en América Latina, Guerrero, Eduardo, ed. ; Velasco, Ana Maria, ed. ; Maldonado, Gabriela, ed.

- IUCN, Regional Office for South America ; Fundación Ecológica Universal, EC - Quito : UICN SUR, 2003

Achieving environmental objectives: the role and value of communication, education, participation and awareness (CEPA) in conventions and agreements in Europe, Martin-Mehers, Gillian, ed. ; Calvo, Susana, ed. ; Auchincloss, Elisabeth, ed. ; Goldstein, Wendy, ed. - IUCN Commission on Education and Communication - Gland : IUCN, 2004

Communicating biodiversity conservation to forest owners in East-Central Europe: major issues and model communication strategies, Tyszko, Piotr, ed. - IUCN, Programme Office for Central Europe - Warszawa : IUCN Programme Office for Central Europe, 2004

Communicating protected areas, Hamú, Denise, ed. ; Auchincloss, Elisabeth, ed. ; Goldstein, Wendy, ed. - IUCN Commission on Education and Communication - Gland : IUCN, 2004

Engaging people in sustainability, by D. Tilbury and D. Wortam, IUCN Commission on Education and Communication, Gland, Switzerland, 2004

Tribute to Yolanda Kakabadse IUCN President, CEC video prepared by Ricardo Carvalho for the IUCN WCC in Bangkok, Thailand, 2004

CEC Chairs report to the IUCN Congress, video report by Ricardo Carvalho, IUCN WCC in Bangkok, Thailand, 2004

La Ciudadanía Ambiental Global. Manual para docentes de educación básica de América Latina y el Caribe, PNUMA/UICN-CEC, Eloiza Trellez, Regional manual for teachers on environmental conventions and how to involve the education community in local actions, IUCN Commission on Education and Communication, IUCN, Regional Office for South America – Quito, 2005

Redefining Capacity Development for the 21st century, New Learning for Sustainable Solutions, Keith Wheeler, Frits Hesselink and Corli Pretorius, IUCN Commission on Education and Communication - Gland : IUCN, 2005

La ciudadanía ambiental global. Folletos nacionales de Ecuador, Perú, Chile, Argentina, Costa Rica, México y Cuba, IUCN-CEC y PNUMA, National information on environmental conventions for the educational community, IUCN Commission on Education and Communication, IUCN, Regional Office for South America – Quito, 2006

Guía metodológica para aplicación en el aula de la propuesta "Ciudadanía Ambiental Global", UICN-CEC y PNUMA. Carlos Crespo, Betty Araujo, Cecilia Amaluisa, IUCN Commission on Education and Communication, IUCN, Regional Office for South America – Quito, 2006

Designing a communication strategy : the 4-P workshop, IUCN Commission on Education and Communication ; IUCN ; Conservation International - Washington, D.C. : Conservation International, 2006.

Communication, Education and Public Awareness (CEPA), A toolkit for National Focal Points and NBSAP Coordinators, Hesselink, F.J. e.a., IUCN Commission on Education and Communication, Secretariat for the Convention on Biological Diversity, HECT Consultancy, CD ROM and web based version (www.cepatoolkit.org), Utrecht - Gland 2007

Agua y Desarrollo Local: Políticas y Prácticas para el Desarrollo Sostenible en la Región Andina. UTPL/IUCN/GDLN. On line course on Water and Local Development, for local governments in the Andean Region. The course content and approach was developed by IUCN-Sur/WANI and CEC, IUCN Commission on Education and Communication, IUCN, Regional Office for South America – Quito, 2007

Communication, Education and Public Awareness (CEPA), A toolkit for National Focal Points and NBSAP Coordinators, Hesselink, F.J. e.a., IUCN Commission on Education and Communication, Secretariat for the Convention on Biological Diversity, Montreal, 2008

Asia-Pacific guidelines for the development of national ESD Indicators
IUCN Commission on Education and Communication ; Unesco ; Japanese Funds in Trust - Bangkok, TH : UNESCO Asia and Pacific Regional Bureau for Education, 2007.

Monitoring and assessing progress during the UNDESD in the Asia-Pacific region: **a quick guide to developing national ESD indicators**, IUCN Commission on Education and Communication ; Unesco ; Japanese Funds in Trust - Bangkok, TH : UNESCO Asia and Pacific Regional Bureau for Education, 2007

Seguimiento y evaluación de los avances durante el DEDS en la región de Asia-Pacífico: Guía rápida para el desarrollo de indicadores nacionales relativos a la EDS, IUCN Commission on Education and Communication ; Unesco ; Japanese Funds in Trust - Bangkok, TH : UNESCO Asia and Pacific Regional Bureau for Education, 2007.

Island voices - island choices : developing strategies for living with rapid ecosystem change in small islands, Rietbergen, Simon ; Hammond, Tom ; Sayegh, Chucri ; Hesselink, Frits ; Mooney, Kieran - IUCN Commission on Ecosystem Management - Gland : IUCN, 2008

Annex 3. CEC Events

The following are meetings and events organized by the Commission, or organized by or in partnership with others, in which Commission members had a major input, as part of their Commission work.

1950-1959

To be further researched.

1960-1969

Workshop on Conservation Education held at Nairobi, Kenya, on 12-13 September 1963, IUCN Commission on Education

Symposium on Conservation education at the university level at Lucerne, Switzerland, 23-24 June, 1966, IUCN Commission on Education; Unesco

Conference on Conservation of Nature and Natural Resources in Tropical South-East Asia, Bangkok, Thailand, 29 November - 4 December 1965, IUCN Commission on Education

First International Youth Nature Conservation Camp jointly with IYF under the auspices of the IUCN Commission on Education. Slovenský ráj (Slovak Paradise) PLA, Czechoslovakia, August 1966

International Meeting on Conservation Education with the Establishment of the East-Europe Committee of the IUCN Commission on Education. Praha/Krkonoše (Giant Mountains) National Park, 25.-30.9.1967.

Conference on Conservation of Renewable Natural Resources, Bariloche, Argentina, 27 March - 2 April 1968, IUCN Commission on Education

Annual Meeting of the NWEC, IUCN Commission on Education, followed by Conference on Conservation Education for Finnish Teachers. Kevo Nature Park/Helsinki, August 1968.

Second International Youth Conservation Camp in cooperation with the EEC, IUCN Commission on Education, Krkonoše (Giant Mountains) National Park, Czechoslovakia, August 1968.

Second Conference of the East-Europe Committee, IUCN Commission on Education. Berlin/Müritzhof, German Democratic Republic, 11.-15. 11. 1968.

Environmental Conservation Education Problems in India organized by the IUCN Commission on Education, together with the Commission's meeting. Dehra Dun, India, 21.-22.11.1969.

The Problems of Environmental Conservation Education among the Population of Rural Areas. Morning session of the 11th Technical Meeting of IUCN on 28 November 1969, New Delhi, India.

Third International Youth Conservation Camp, coorganized by the EEC of the IUCN Commission on Education, Tatra National Park, Czechoslovakia, August 1969.

1970 - 1979

International Working Meeting on Environmental Education in the School Curriculum. IUCN (Commission on Education) jointly with UNESCO. Foresta Institute for Ocean and Mountain Studies, Carson City, Nevada, USA, 20 June – 10 July 1970.

Third Conference of the East-Europe Committee, jointly with the meeting of the IUCN Commission on Education. Sofia, Bulgaria, 29 September – 3 October 1970.

International Youth Conference on the Human Environment. Convened by IYF jointly with IUCN and with many other partners. MacMaster University, Hamilton, Ontario, Canada, 20-30 August 1971.

Environmental Education in an Urban Society. Ninth Regional Conference of the North-West-Europe Committee, IUCN Commission on Education, Rotterdam, Netherlands, 30 August-5 September 1971.

European Working Conference on Environmental Conservation Education, Gottlieb Duttweiler Institut, Rüschlikon near Zürich, Switzerland, 15-18 December 1971.

Environmental Conservation Education in the School Curriculum in East-European Countries. Seminar of the East-Europe Committee, IUCN Commission on Education, Krościenko-Szczawnica, Poland, 22-28 June 1972.

International Course for Teacher Training in Environmental Conservation, organized by IUCN Commission on Education jointly with the UK Field Studies Council, Betsy-Y-Coed, North Wales, UK, August 1972.

International Working Meeting on Environmental Education at the Tertiary Lever, organized by the IUCN Commission on Education, Teacher Training College, London, Ontario, Canada, September 1972.

Meeting of IUCN Commission on Education, IUCN General Assembly, Banff, Canada, September 1972.

Meeting of IUCN Commission on Education, Second World Parks Congress, Yellowstone-Grand Teton, September 1972.

International Meeting of Young Conservationists from East European Countries, organized by the EEC of IUCN Commission on Education, Sofia/Varna/Nesebar, Bulgaria, June 1974.

1980-1989

Meeting of the East-Europe Committee of the IUCN Commission on Education, Pec Pod Snezkou – Czechoslovakia, 1982

International Conference on "Fine Arts and Photography as Tools of Nature Conservation at the occasion of the annual meeting of the EEC, IUCN Commission on Education, Tallinn, Estonia, 30 May – 3 June 1983

First Joint Meeting of the NWEC and EEC of the IUCN Commission on Education. Helsinki/Espoo, 28-31 May 1984.

Meeting of the IUCN Commission on Education, International Conference on "Environmental Conservation Education in National Parks and Other Protected Areas, Joint NWEC/EEC Meeting. Budapest/Kiskunág National Park, Hungary, 19-23 May 1986.

Establishment and Use of Ecopedagogical Areas in Environmental Education, international seminar organized by the EEC, IUCN Commission on Education, Volary, Czechoslovakia, May 1987

International Conference on Education for Sustainable Development in the framework of the Third NWEC-EEC Joint Meeting, Bø, Telemark, Norway, 3-12 June 1988.

1990-1999

International Conference on Environmental Communication, IUCN Commission on Education and Communication, Bangalore – India, 1990

Fourth Joint Meeting of NWEC/EEC, IUCN Commission on Education and Communication, Møn, Denmark, September 1990.

CEC Members Meeting, IUCN General Assembly Perth, Australia, 1990

World Congress on Protected Areas Workshop on Planning of Education and Communication in Protected Areas, IUCN Commission on Education and Communication, Caracas – Venezuela, 1991

UNCED NGO Forum Workshop on Strategic Planning of Education for Sustainable Development, IUCN Commission on Education and Communication, Rio de Janeiro – Brazil, 1992

ECO-ED Workshop on Strategic Planning of Education for Sustainable Development, IUCN Commission on Education and Communication, Toronto- Canada, 1992

Educating for Sustainable Tourism, international conference held by all three European Regional Committees, IUCN Commission on Education and Communication jointly

with the University of Ljubljana, travelling conference from Kranjska Gora to Koper, Slovenia, 17-24 September 1992.

Conference on Planning Environmental Education in Europe, European Committee for Environmental Education**,** IUCN Commission on Education and Communication Bergen – Netherlands, 1993

Planning of Education and Communication for Sustainable Development, CEC Workshop at IUCN South American Members meeting in Parati, Brazil, 1993

Conference to establish the South and South East Asian Network on Environmental Education (SASEANEE), Centre for Environment Education India and IUCN Commission on Education and Communication, Ahmedabad – India, 1993

CEC members Meeting, IUCN General Assembly, Buenos Aires, Argentina, 1994

IUCN General Assembly Workshop on Planning Education to care for the Earth, IUCN Commission on Education and Communication, Buenos Aires – Argentina, 1994

IUCN-UNESCO Expert Meeting on National Strategies for Environmental and Development Education Europe, IUCN Commission on Education and Communication, Gland - Switzerland,1995

Conference on Planning Environmental Education in Europe, Jurmala – Finland 1995, European Committee for Environmental Education**,** IUCN Commission on Education and Communication, Jurmala – Finland 1995

International Training Course on Environmental Education, SASEANEE, UNESCO, Centre for Environment Education India and IUCN Commission on Education and Communication, Ahmedabad – India, 1995

IUCN-UNESCO Expert Meeting on National Strategies for Education and Communication for the Environment and Sustainable Development in Latin America, IUCN SUR, IUCN Commission on Education and Communication, Quito - Ecuador,1995

International Training Course on Environmental Education, SASEANEE, UNESCO, Centre for Environment Education India and IUCN Commission on Education and Communication, Ahmedabad – India, 1996

Conference on Education and Communication for Biodiversity, key concepts, strategies and case studies in Europe, European Committee for Environmental Education**,** IUCN Commission on Education and Communication, Valsain 1996

IUCN-UNESCO Expert Meeting on National Strategies for Education and Communication in Asia, IUCN Asia Program, Center for Environment Education, IUCN Commission on Education and Communication, Bangkok - Thailand,1996

World Conservation Congress 2-day CEC Members Meeting: Open Steering Committee meeting; Regional meetings; Informal network exchange; Working groups on internet, formal education, non formal education, national strategies; Special training ses-

sions on project management for educators, IUCN Commission on Education and Communication, Montreal – Canada, 1996

World Conservation Congress Workshop Implementing Strategies for Sustainability: Communication – key to successful strategies, IUCN Commission on Education and Communication, Montreal – Canada, 1996

World Conservation Congress Workshop Implementing Strategies for Sustainability: Reaching target audiences and changing behaviour: effective communication in strategies, IUCN Commission on Education and Communication, Montreal – Canada, 1996

World Conservation Congress Special Session on Developments concerning Awareness and Education for Sustainable Development, IUCN, UNESCO, UNEP, IUCN Commission on Education and Communication, Montreal – Canada, 1996

World Conservation Congress Special Working Group on IUCN Corporate Communication, IUCN DG, Ammirati Puris Lintas and IUCN Commission on Education and Communication, Montreal – Canada, 1996

Conference on Education and Communication for Biodiversity, key concepts, strategies and case studies in Europe, European Committee for Environmental Education**,** IUCN Commission on Education and Communication, Gland, Switzerland 1996

Expert meeting to structure information and communication for the Pan European Biological and Landscape Diversity Strategy, IUCN Commission on Education and Communication, Scheveningen – Netherlands,1997

International Training Course on Environmental Education, SASEANEE, UNESCO, Centre for Environment Education India and IUCN Commission on Education and Communication, Ahmedabad – India, 1997

Workshop for Asian Biodiversity Strategy and Action Plan Co-ordinators, Bangkok 1998, IUCN Asia Program, IUCN Commission on Education and Communication

Global Biodiversity Forum Workshop on Public Education and Awareness, How to put it into practice, Article 13 of the Convention on Biological Diversity, IUCN Commission on Education and Communication, Bratislava 1998

Training Workshop for Policymakers in EU Accession Countries on Communication, Education and Public Awareness for the Pan European Biological and Landscape Diversity Strategy, European Centre for Nature Conservation and IUCN Commission on Education and Communication, Banska Stiavnica – Slovak Republic, 1998

Conference on Learning in Protected Areas – How to Assess Quality, European Committee for Environmental Education**,** IUCN Commission on Education and Communication, Neusiedler See – Austria/Hungary, 1998

International Training Course on Environmental Education, SASEANEE, UNESCO, Centre for Environment Education India and IUCN Commission on Education and Communication, Ahmedabad – India, 1998

ESDebate : international debate on education for sustainable development, Moderated Internet Debate in three rounds, IUCN Commission on Education and Communication, Dutch Program Learning for Sustainable Development 1998-1999

Training Workshop for Civil Servants and NGO Managers in EU Accession Countries on Communication, Education and Public Awareness for the Pan European Biological and Landscape Diversity Strategy, European Centre for Nature Conservation, IUCN East European Program and IUCN Commission on Education and Communication, Warsaw - Poland, 1999

Training Program for biodiversity managers in five EU Accession Countries on strategic communication for PEBLDS and Natura 2000, SPAN Consultants, HECT Consultancy**,** IUCN Commission on Education and Communication, Czech Republic, Hungary, Poland, Slovakia, Slovenia 2000 - 2004

Workshop for Latin American Biodiversity Strategy and Action Plan Co-ordinators, IUCN SUR Program, IUCN Commission on Education and Communication, Galapagos 1999,

Conference on Learning to Sustain: Promoting Understanding in Protected Areas, European Committee for Environmental Education**,** IUCN Commission on Education and Communication, Losehill Hall – UK, 1999

European Expert Meeting on Sustainable Development and Environmental Education, IUCN Commission on Education and Communication; Dutch Program Learning for Sustainable Development, Soesterberg - Netherlands, 1999

International Training Course on Environmental Education, SASEANEE, UNESCO, Centre for Environment Education India and IUCN Commission on Education and Communication, Ahmedabad – India, 1999

2000 - 2008

CEC members Meeting, World Conservation Congress, Amman Jordan, 2000

World Conservation Congress Workshop Mobilising Knowledge for Biodiversity, IUCN Commission on Education and Communication in partnership with CIDA, Species Survival Commission, World Bank, World Parks Commission, WWF, Amman Jordan, 2000

BEPA Online, internet debate on Biodiversity, Education and Public Awareness: Towards global communities of practice, moderated internet debate, IUCN Commission on Education and Communication, Dutch Program Learning for Sustainable Development, 2000-2001

Expert Meeting on Biodiversity, Education and Public Awareness: Towards global communities of practice (based on 'BEPA Online'), IUCN Commission on Education and Communication, Dutch Program Learning for Sustainable Development, 2001

Global Biodiversity Forum Workshop on Education, Communication and Awareness, Article 13 of the Convention on Biological Diversity, IUCN Commission on Education and Communication, The Hague – Netherlands, 2002

IUCN-UNESCO-SCBD Side Event COP 6 on Education, Communication and Awareness, to gain support for a work program for Article 13 of the Convention on Biological Diversity, IUCN Commission on Education and Communication, The Hague – Netherlands, 2002

International Seminar on Education and Communication as Instruments for Environmental Policy for Directors and Managers of the Brazilian Ministry of Environment, Dutch Ministry of Environment, German Ministry of Environment, Norwegian Ministry of Environment, Swedish Ministry of Environment, World Resources Institute, ECOM, HECT Consultancy, IUCN Commission on Education and Communication, Rio de Janeiro – Brazil, 2002

Strategic Planning Workshop for the new Quadriennium, East African Regional Network IUCN Commission on Education and Communication, Nairobi – Kenya, 2003

World Parks Congress Workshop Communicating Protected Areas, IUCN Commission on Education and Communication, Durban – South Africa 2003

World Parks Congress CEC training course on strategic communication, IUCN Commission on Education and Communication, Durban – South Africa 2003

World Parks Congress Community Theater on the role of education and communication in protected area management, IUCN Commission on Education and Communication, Durban – South Africa 2003

World Parks Congress Closing Video, ECOM, IUCN Commission on Education and Communication, Durban – South Africa 2003

CEC Members Meeting, World Conservation Congress, Bangkok, Thailand, 2004

CEC Workshop to launch the World Conservation Learning Network, IUCN World Conservation Congress, Commission on Education and Communication, Bangkok, Thailand 2004

CEC Workshop to launch the IUCN – UNESCO Indicators for ESD Partnership, IUCN World Conservation Congress, Commission on Education and Communication, UNESCO, Bangkok, Thailand 2004

Reunión Regional de Expertos y Expertas en Aprendizaje a Distancia para la Sustentabilidad, Universidad de Guadalajara, México, Expert meeting on Distance Learning and Sustainability, organized by the IUCN World Conservation Learning network (WCLN), IUCN Commission on Education and Communication and the University of Guadalajara, Mexico 2005

Innovative Learning for Conservation, Poverty Eradication and Sustainable Development, organized by the IUCN World Conservation Learning network (WCLN), IUCN Commission on Education and Communication and the University of Stellenbosch. South Africa, 2006

Exploring Deep Change Processes Workshop, IUCN Commission on Education and Communication, Gland 2006

On line course on Water and Local Development: Policies and practices for sustainable development in the Andean Regional, UTPL/IUCN/GDLN. Developed by the Water and Nature Initiative the IUCN World Conservation Learning network (WCLN) and the IUCN Commission on Education and Communication, Quito 2007

New Learning for Sustainability in the Arab region, organized by the IUCN World Conservation Learning network (WCLN), IUCN Commission on Education and Communication and the Bibliotheca Alexandria, Egypt 2007

Intergenerational Partnerships On-line experiment to learn about sustainable development through 'buddy-partnering', IUCN Commission on Education and Communication, Earth Charter Youth Initiative, 2008

Annex 4. IUCN Presidents, Director Generals, General Assemblies

IUCN Presidents

Charles Bernard, Switzerland, 1948 -1954
Roger Heim, France, 1954 – 1958
Jean Baer, Switzerland, 1958 – 1963
Francois Bourliere, France, 1963 – 1966
Harold J. Coolidge, USA, 1966 – 1972
Donald Kuenen, Netherlands,1972 – 1978
Mohamed Kassas, Egypt, 1978 – 1984
Monkombu Swaminathan, India, 1984 – 1990
Sridath Ramphal, Guyana, 1990 – 1994
Jay Hair, USA, 1994 – 1996
Yolanda Kakabadse, Ecuador, 1996 – 2004
Valli Moosa, South Africa, 2004 - 2008

IUCN Director Generals

Jean Paul Harroy, 1948 – 1955
M.C. Bloemers, 1959 – 1960
Gerald Watterson, 1962 – 1962
Hugh Elliott, 1963 – 1966
Joe Berwick, 1966 – 1970
Gerardo Budowski, 1970 – 1976
David Munro, 1977 – 1980
Lee Talbot, 1980 – 1982
Kenton Miller, 1983 – 1988
Martin Holdgate, 1988 – 1994
David McDowell, 1994 – 1999
Marita Koch-Weser, 1999 – 2001
Achim Steiner, 2001 – 2006
Julia Marton – Lefevre, 2006 –

IUCN GENERAL ASSEMBLIES

1 Fontainebleau, France – October 1948
2 Brussels, Belgium – October 1950
3 Caracas, Venezuela – September 1952
4 Copenhagen, Denmark – August/September 1954
5 Edinburgh, UK – June 1956
6 Athens/Delphi, Greece – September 1958
7 Warsaw/Cracow, Poland – June/July 1960
8 Nairobi, Kenya – September 1963
9 Lucerne, Switzerland – June/July 1966
10 New Delhi, India – November 1969
11 Banff, Canada – September 1972
12 Kinshasa, Zaire – September 1975
13 Geneva, Switzerland – April 1977 Extraordinary GA
14 Askhabad, USSR (Turkmenistan) – October 1978
15 Christchurch, New Zealand – October 1981

16 Madrid, Spain – November 1984
17 San Jose, Costa Rica – February 1988
18 Perth (Western)Australia – December 1990
19 Buenos Aires, Argentina – January 1994
20 in the framework of the 1st World Conservation Congress
23 in the framework of the 2nd WCC, Amman, Jordan – October 2000
24 in the framework of the 3rd WCC, Bangkok, Thailand

Annex 5. CEC Secretariat Staff

Alain Gilles, Secretary Education Commission in the fifties (no further data available)
Hans Goudswaard, Honorary Secretary Education Commission in the fifties and sixties (no further data available)

Jan Čeřovský, Education Officer, 1969 - 1973

Alfred Hofmann, Education Officer, 1973 - … (no further data available)
Naseeb Dajani, Education Officer, 1982 -1984 (no further data available)
Salvano Briceño, Education Officer, 1984 (no further data available)

Joanna Boddens Hosang, Acting CEC Programme Coordinator, 1990 – 1992

Wendy Goldstein, Head, Environmental Education and Communication, 1992 – 2004

Cecila Nizzola-Tabja, CEC Membership Liaison Officer, 1992 – present,

Ana Puyol, IUCN-SUR, Coordinator Environmental Education and Communication Programme - 1993-2000; Assistant to the CEC Chair 2001-2005

Corli Pretorius, Head, Global Communications, CEC Focal Point, 2004-2006

Elisabeth Crudgington (neé Auchincloss), Learning & Leadership Officer, 2003 – present

Gillian Martin Mehers, Head, Learning & Leadership, CEC Focal Point, 2006 – present

Caroline Twigg (neé Redrup), Learning & Leadership Officer, 2007-2008

Nicole Thonnard-Voillat, Learning & Leadership Officer, 2008 – present

Annex 6. CEC Chairs

William Vogt (USA, 1902 -1968), Chair Education Committee from 1948 -1952

Ira Gabrielson (USA, 1889 - 1977), Chair Education Committee from 1952 -1958

Max Nicholson (UK, 1904 - 2003), Chair Education Commission from 1958-1960

L.K.Shaposhnikov (USSR, 1915 - 1979), Chair Education Commission from 1960 -1978

Don Aldridge (UK, 1930 – 2008), Education Commission Chair 1978

Pierre Goeldin (Switzerland, 1937), Acting Chair Education Commission from 1978 -1979

Al Baez (USA, 1913 - 2007), Chair Education Commission 1979 -1984

Gerald Lieberman (USA, 1950), Chair Education Commission from 1984 – 1986

M.A. Partha Sarathy (India, 1923), Chair Commission on Education and Training and Commission on Education and Communication from 1986 -1994

Frits Hesselink (1945), Chair Commission on Education and Communication from 1994 - 2000

Denise Hamú (Brazil, 1959), Chair Commission on Education and Communication from 2000 - 2006

Keith Wheeler, (USA, 1952), Chair Commission on Education and Communication from 2006 – 2012

Annex 7. CEC Wall of Fame

The names listed here have been - to the knowledge of the authors - key leaders and thinkers in the CEC network during the past decades.

1948 – 1960

Jean Baer
Harold Coolidge
Frank Fraser-Darling
Ira Gabrielson
Alain Gille
Richard Gordon Miller
Hans Goudswaard
Henry Makowski
EdwardMax Nicholson
Jacques de Smidt
William Vogt
Harry Wals

1960 – 1970

James Aldridge
Gerardo Budowski
Maria Buchinger
Jan Cerovsky
Jan-Piet Doets
Arturo Eichler
Lars-Eric Esping
Vladimir M. Galushin
Richard Gordon Miller
Hans Goudswaard
Martha Henderson
Anna van Hofsten
Jonathan Holliman
Edgar Kesteloot,
Fred Lauritzen
Michel Maldague
Philip H. Oswald
Mario Pavan
Tom Pritchard
Franco Pedrotti
L.K. Shaposhnikov
Tadeusz Sczcesny
Harry Wals

1970 – 1980

Hein van Bohemen
Jan Cerovsky
Wolfgang Erz
Pierre Goeldin
Hans Goudswaard

Ricardo Lutti
Robert Hundt
Robert Saveland
Enikö Szalay-Marzsó
Marin Toshkov
Fred van der Vegte
David Withrington

1980 – 1990

Don Aldridge
Nancy Anderson
Boštjan Anko
Nathaniel Arap Chumo
Al Baez
John Baines
Abraham Blum
Mark Boulton
Salvano Briceño
Gerardo Budowski
Jan Cerovsky
Naseeb Dajani
Jaan Eilart
Wolfgang Erz
Lars-Eric Esping,
Matti Helminen
Sofia Jakowska
Yolanda Kakabadse
Julia Marton Lefevre
Chris MaasGeesteranus
Rosalyn Osborn
Ján Pagáč
M.A.Partha Sarathy
John Smyth
Stephen Sterling
Kathy Stiles
Jiří Svoboda
Enikö Szalay-Marzsó
Peter Townsend
Josef Velek

1990 – 2000

Marta Andelman
Boštjan Anko
John Baines
Alicia Barcena
Peter Bos
Susana Calvo
Jan Cerovsky
Juliana Chileshe
Maurillio Cipparone

Marco Encalada
Jia Feng
Wendy Goldstein
Edgar Gonzalez
Denise Hamu
Frits Hesselink
Branka Hlad
Anna Kalinowska
Mary Karanja
Monica Lieschke
Chris MaasGeesteranus
Gillian Martin Mehers
Marta Monroe
Ueli Nagel
Manfred Oepen
Sylvi Ofstad
Rosalyn Osborn
Joy Palmer
Badir Pande
M.A.Partha Sarathy
Jean Perras
Ana Puyol
Kartikeya Sarabhai
John Smyth
Stephen Sterling
Kathy Stiles
Wazha Tema
Daniella Tilbury

2000-2008

Andy Alm
Cecilia Amaluisa
Marta Andelman
Deborah Baranga
Moussa Batchily Ba
Peter Bos
Rafael Bosque
Gwen van Boven
María Sofía Brutton
Susana Calvo
Ricardo Carvalho
Haroldo Castro
Cheryl Charles
Carlos Crespo
Peter Croal
Arturo Curiel
Katalin Czippan
Marco Encalada
Patricia Fernández-Dávila

Valeria Fuentealba
Tommy Garnett
Hans van Ginkel
Andreas Glanznig
Wendy Goldstein
Denise Hamu
Frits Hesselink
Branka Hlad
Doug Hulyer
Anna Kalinowska
Sjeril Khandil
Gillian MartinMehers
José Miguel Molina
Marta Monroe
Michael Moss
Kobus Muller
Sylvi Ofstad
Suzana Padua
Guillermo Priotto
Ana Puyol
Beatriz Román Enriquez
David Solano
Monthip Tabucanon
Wazha Tema
Daniellla Tilbury
Brad Smith
Rosa María Vidal
Keith Wheeler