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ABSTRACT
                This report presents the results and activity ideas
created by a peace and international education project. The project
implemented and evaluated activities suitable for primary school
pupils over a three-year period. The goals, contents, and methods
presented are those of peace and environmental education. The
teaching suggestions, methods, and activity ideas are based on
knowledge and research results in developmental and
sociopsychological studies and on moral education. The report
discusses the meaning, functions, and impact of peace and
international education. Peace and environmental education are
discussed from the following perspectives: integration, general
pedagogical principles, implementation possibilities, and new
learning theories and practices. The report tries to answer the
question of how to create the values, attitudes, and skills that make
people act for peace and global survival. The document discusses
structural violence and education for positive peace, human rights,
experiential learning, cooperative learning, promoting moral growth,
growth for tolerance, promoting empathy and altruism, and learning
for cooperation and non-violence in the areas of peace and
environmental education. Environmental responsibility is broken down
into sensitivity to nature and environmental education, and
environmental education as a part of formal education. The project
found that teachers needed to have a positive attitude towards new
ideas in order to create a new model of teaching. Problems of
implementation can be alleviated somewhat by keeping all the staff
and parents informed of all the new activities. Cooperative learning
and learning games helped increase pupils' self-esteem, moral
development, and critical thinking. (DK)

ED 364 490

Riitta Wahlström

GROWTH TOWARDS PEACE AND ENVIRONMENTAL RESPONSIBILITY

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GROWTH TOWARDS PEACE AND ENVIRONMENTAL RESPONSIBILITY

From theory to practical implications

RIITTA WAHLSTRÖM

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ABSTRACT

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Descriptors: peace education, international education, moral education, environ-
          mental education.

TIIVISTELMÄ

Raportissa tarkastellaan kasvatusta edistämässä ihmiskunnan kehitystä kohti rauhaa ja ympäristövastuuta. Raportissa esiteltävät pedagogiset periaatteet, kasvatusmenetelmät ja toimintaehdotukset on liitetty kehitys- ja sosiaalipsykologisiin perusteisiin sekä tutkimustietoon moraalikasvatuksen ja ympäristökasvatuksen alueelta. Rauhan- ja ympäristökasvatusta arvioidaan integraation, kasvatusperiaatteiden, uusien oppimisnäkemysten ja sovellutusmahdollisuuksien suhteen. Raportissa esitellään rauhan- ja kansainvälisyyskasvatuksen projektin tärkeimpiä tuloksia. Kokeilu suoritettiin kolmen vuoden aikana peruskoulun ala-asteella. Raportissa esitetään lukuisia käytännön toimintaehdotuksia rauhan- ja ympäristökasvatuksesta. Rauhan- ja kansainvälisyyskasvatuksen merkitystä ja vaikutuksia pohditaan tutkimusten ja kokeilun tulosten valossa.

Asiasanat: rauhankasvatus, ympäristökasvatus, kansainvälisyyskasvatus, moraalikasvatus

PREFACE

"The Earth is my home, the humanity is my family".
                    Kahlil Gibran

The history of this report goes back to the International Year of Peace, 1986. The National Board of Social Welfare of Finland sponsored a research project called Peace Education Project. Its purpose was to gather and develop activity ideas and methods of educating for peace in day care (for 3-6 year olds). I worked as a researcher in that project and after finishing that project I started Peace and International Education project in 1988. Its purpose was to develop the activity ideas and methods of peace and international education at the primary school level (for 7-13 olds). During these years I have been conducting many peace and international education study programmes and studied the psychological problems of warfare, militarism and enemy image. This report has been greatly influenced by all these activities.

I am thankful for all my Finnish and foreign students from Malta, Namibia, Tanzania and Ethiopia from whom I have obtained many important views. I devote my deep gratitude to those preschool teachers and teachers I had the privilege to work with during my two projects. I am deeply grateful to International Peace Research Association (IPRA), which actively has promoted my knowledge about peace and war questions and peace and international education.

This report tries to answer one important question: How to create the values, attitudes and skills which make people act for peace and global survival? Surely it is impossible to give a final answer, but I hope this report may be a useful start to find an answer.

My appreciation is extended to Director of Institute for Educational Research and the staff. It has been a privilege in my life to be able to work at this institute.

Jyväskylä, 26th July, 1991

Riitta Wahlström

CONTENTS

1. INTRODUCTION

1.1. The possibilities of education in the modern world

" Education is the fundamental method of social progress and reform"
   John Dewey

John Dewey's statement above, assigns a real important task for education in general. Society needs reform. In one minute 30 children die because of the lack of basic health care, and at the same time about 4 million dollars are wasted on armament. Researchers expect that during the near future there will be millions of environmental refugees and that clean water and soil are going to be more rare day by day (Kekkonen 1990).

People are more and more worried about environmental problems, but still little is known and done about how to change people's attitudes and behaviour in general, and how to educate new generations to take both local and global responsibility.

Global responsibility demands local responsibility first. Very often local responsibility needs a global view. Global responsibility comes from understanding the total interdependence of the human race on Nature, Mother Earth. We must remember that the environmental problems cannot be solved without first solving the developmental problems and on the other hand, the developmental problems cannot be solved without solving environmental problems.

Environmental problems are urgent today, and the need to care for the environment is so obvious and crucial that the importance of co-operation and global responsibility has never been greater. There are no armaments which can provide shelter from air pollution or acid rain - or any other threats to our environment. The only defence we have against such threats is international joint efforts to deal with these problems.

Research tells us that - even if all pollution could, somehow, be stopped today - the pollution which already exists would continue to harm life on earth for years to come.

Arms manufacturers and the military establishment are jointly responsible for the most terrifying forms of pollution affecting the Earth. The testing of nuclear weapons, oil pollution, and chemical wastes have despoiled the environ-

ment of our planet. However, it has always been difficult to write about such things, because of 'national security' or restricted information. As Batisse (1973,18) writes *"Many scientists are today prisoners of some kind of industrial or military secrecy."*

We are in the modern world totally interdependent on each other. The 1960 Montreal Declaration from UNESCO's 2nd International Conference on Adult Education included the following statement (Unesco 1960):

"Our first problem is to survive. It is not a question of the survival of the fittest: either we survive together or we perish together. Survival requires that the countries of this world must learn to live together in peace ".

Our global interdependence is becoming more and more evident because the environmental threat is a global one. Peace and environmental Education works in theory and practice towards global survival.

1.2. The goals of this report

This report is a short introduction to answers for three questions: (i) What is peace and environmental education?, (ii) How to implement it in education? and (iii) What is the profile of peace and environmental education?. The report includes suggestions for actitivities for education, mainly to be used a[:] schools and at colleges. These suggestions are only a small part of all possible ones, and they present ideas which are already in use and found to work. The suggestions have been selected so that they could be implemented not only here in Finland but nearly all over the world. Using them requires no special equipment. The preliminary results of the impact of the peace and international education project is presented in the last chapter of this report.

The proposed methods for peace and environmental education ought to be possible in most of the schools and colleges. Cooperation learning is possible to implement all over the world. It does not need any special arrangements. But using those ideas, much is demanded of the teacher. Possibly needed are quite a new way of thinking and new methods for teacher training. It means getting rid of authoritarian, teacher-centered way of teaching. It means getting rid of the belief that the truth lies only in the textbook. It means that *ethics is integral - to the process of learning.* In every subject, selection of the knowledge presented has its ethical point. Ethical point here means that learning should aim to reform the society to be better for humans and nature.

2. EDUCATION FOR PEACE AND ENVIRONMENTAL RESPONSIBILITY

2.1. UNESCO 1974 Recommendation

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO), meeting in Paris from 17 October to 23 November 1974, at its eighteenth session wrote the Recommendation concerning Education for International Understanding, Co-operation and Peace and Education relating to Human Rights and Fundamental Freedoms. The Recommendation is basic background for knowing what peace and international education is. The Recommendation defines the concept *'education'* in the following way:
"*'Education'* implies the entire process of social life by means of which individuals and social groups learn to develop consciously within, and for the benefit of, the national and international communities, attitudes, aptitudes and knowledge. This process is not limited to any specific activities." That kind of definition of education suits for the practice of peace and international education.

The Recommendation continues:

the terms 'international understanding, 'co-operation'and 'peace' are to be considered as an indivisible whole based on the principle of friendly relations between peoples and states having different social and political systems and on the respect for human rights and fundamental freedoms. In the text of this recommendation, the different connotations of these terms are sometimes gathered together in a concise expression *'international education.'* *'Human rights' and 'fundamental freedoms'* are those defined in the United Nations Charter, the Universal Declaration of Human Rights and the International Covernants on Economic, Social and Cultural Rights, and on Civil and Political Rights. *This recommendation applies to all stages and forms of education.*

In order to enable every person to contribute actively to the fulfillment of the aims referred to above, the following objectives should be regarded as major guiding principles of educational policy:

a) an international dimension at all levels of education;

b) understanding and respect for all peoples, their cultures, civilizations, values and ways of life, including domestic ethnic cultures;

c) awareness of the increasing global interdependence between peoples and nations;

d) ability to communicate with others;

e) awareness not only of the rights but also of the duties incumbent upon inviduals, social groups and nations towards each other;

f) understanding of the necessity for international solidarity and co-operation;

g) readiness on the part of the invidual to participate in solving the problems of his/her community, his country and the world at large.

Peace Education should develop a sense of social responsibility and solidarity with less privileged groups and lead to observance of the principles of equality in everyday conduct.

Peace and environmental education concerns violence, war and pollution. The basic task of peace and environmental education is to shape human behavior towards non-violence in relations with other humans and nature.

2.2. Structural violence and education for positive peace

The concept of peace education or education for peace involves the problems of peace and violence. Johan Galtung (1976) has suggested that the problems of peace are broadly fivefold as shown in table 1.

TABLE 1. Studying peace, problems and values.

Problems of peace	Values underlying peace
Violence and war	Non-violence
Inequality	Economic welfare
Injustice	Social justice
Environmental damage	Ecological balance
Alienation	Participation

Turned around, these five problems give values which must underpin any defintion of peace (Hicks 1988,7).

By the late 1960s and early 1970s researchers' attention shifted from direct to indirect structural violence. Structural violence means that even in the peace time, people suffer from inequality, exploitation and discrimination. Structural violence means that in the society there are structures, power- and value systems which lead to inequality and exploitation. Such structural violence may equally lead to death and disminishing of human well-being. It leads to violent mechanisms to keep the social order and to military overspending. According to Galtung, structural violence leads to war and violent acts (see figure 1.).
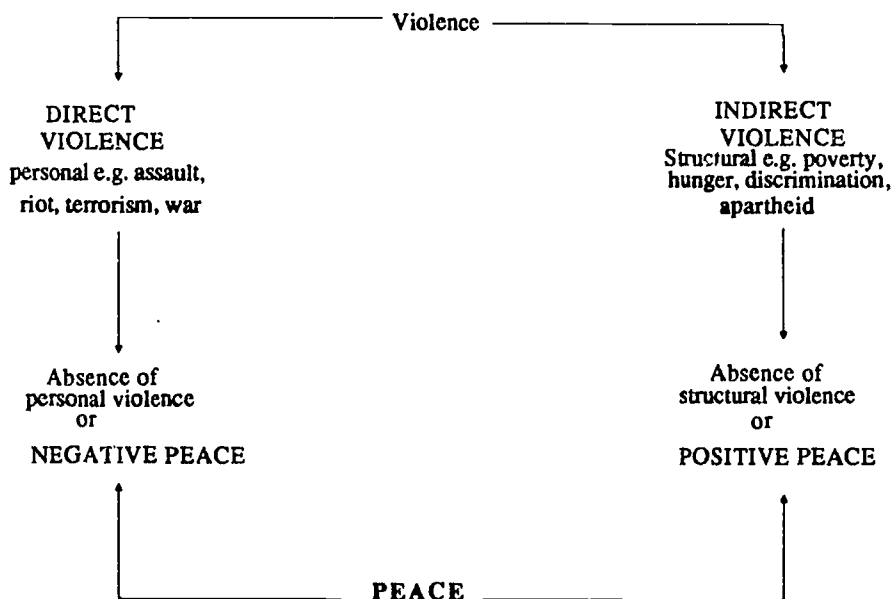

FIGURE 1. Definition of peace (Hicks 1988,6).

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Peace is now seen as involving cooperation and non-violent social change, aimed at creating more equitable and just structures in a society (Hicks 1988,6).

The main purpose of Peace and Environmental Education is to promote world-wide respect for human rights, justice, and care for the environment. It is an ideology that consciously tries to integrate these values into all human activities. It is essential in a democratic society that students develop the skill of critical thinking and ethical responsibility for supporting life.

Peace education is, in fact, education for global survival and for *positive peace*. It is an ideology or 'belief system' which introduces a specific new content into education and into culture generally. Peace Education seeks to create a *peace culture*: it plays an important role in helping people to clarify their values and to explore the implications of new values.

Peace education constructs a new paradigm (pattern) by which one can perceive the world. According to this perception, humanity is experienced as a unity, people are manifesting the same universal life. By perceiving the world in a 'new light,' inviduals can understand the importance of cultural diversity and see how every creature on the Earth has a value 'an sich' (in themselves).

Everyone has to be made aware of this basic bond between him/herself and Nature. Peace and Environmental Education has an important role to play in this process.

In the modern world, direct and continuous action is required for the preservation of life. Non-violence towards people and Nature can - and must - become the sacred value of all humanity, and Peace and International Education will stimulate people to maintain continuous *ethical and spiritual* development.

Peace education does not commit itself to any special political or religious group. It incorporates the same basic values which are to be found in almost every religion - love, respect for all living creatures, non-violence, and the urge to become a sincere and good human being. Education creates a basis for educating people into the belief that it is not important to posses, win, or rule, but to feel and show sympathy for all misfortune and to defend the weak by non-violent means. Galtung (1974) has mentioned that an integral part of Peace Education is to listen carefully to the voice of even the most distant nations and people. I would like to add that it is important to pay attention to the voice of unprivileged, oppressed and powerless people, who very often belong to minority groups. It is a task of Peace and International Education to help the minor cultures to survive.

The supporting of non-violence requires great personal courage in these times, when people tend to further their own interests by means of violence or 'power politics'. Every person who shows non-violence and solidarity against civil injustice is more courageous than the most reckless warrior. Peace and International Education reminds people that real courage is needed every day to oppose militarism and to protect life and Nature.

Bjerstedt, in his article 'Towards a Rational and Didactics for Peace Education' (1990) divides Peace Education into four interacting goal areas, labelled:
1) World Citizen Responsibility
2) Egalitarian Attitudes
3) Preparedness for Non-Violence
4) Readiness to Search for Alternatives

According to Bjerstedt, Peace Education can be illustrated schematically in the following way:

"EDUCATION FOR PEACE"

involves educational efforts to
enhance four interacting
"goal areas":
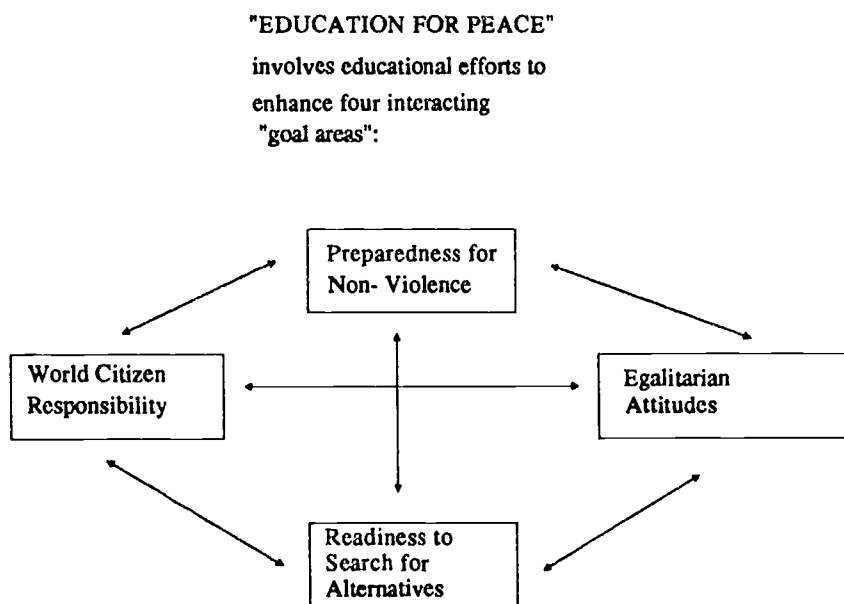
FIGURE 2. Four interacting goal areas of Peace Education. (Bjerstedt 1990,2).

The main purpose of these educational ideas is to unite all the areas of knowledge, attitudes, and action into an integrated whole promoting individual mobilization for peace (Kekkonen 1983,20).

Reardon (1988, XV) mentions in her book Educating for Global Responsibility that: "*The whole of human society is faced with the challenge of making global policy choices that will determine whether or not our species will survive. Education must, therefore, face up to the need to prepare young for global responsibility, to understand the nature and implications of global interdependence, and to accept the responsibility to work for a just, peaceful, and viable global community on planet Earth.*"

The educational task of peace and environmental education is ambitious one. Peace and environmental education aims to the real commitment. The commitment means that one is prepared to do something to promote these values in reality. We know that this aim is not attained only by making human beings more knowledgeable. And we know that having certain values does not lead to certain kind of behaviour. Many research findings tell that people who have positive attitudes concerning environmental care, not necesserily behave accordingly (e.g. Hines et al 1986/87, Uusitalo 1986). Many people do not really take moral responsibility for their attitudes and values. They believe that other people rule the world. They are suffering from the feelings of insignificance, they think that their deeds have no meaning. Peace and environmental education aims to free people from this belief. Everyone has a power to change the world.

3. THE OBJECTIVES OF PEACE AND ENVIRONMENTAL EDUCATION

3.1. Human Rights - background for peace and international education

The Universal Declaration of Human Rights also gives some basic background for peace and international education. In its article 26 (2) it is mentioned:

> Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

The aims of Peace and International Education can be found by referring to the guiding principles laid out in the 1974 UNESCO Recommendation:

- an international dimension and a global perspective in education at all levels and in all its forms
- understanding and respect for all peoples, their cultures, values and ways of life, including domestic ethnic cultures
- awareness of the increasing global interdependence between peoples and nations
- awareness not only of the rights but also of the duties incumbent upon individuals, social groups and nations towards each other
- develop a sense of social responsibility and solidarity with less privileged groups;
- develop a critical understanding of problems at the national and inter national level.
- understanding that non-violent solutions are not only possible but are available for use in all kinds of conflicts.

It is important for humanity to find out what these goals mean in practice, and to consider the kind of *human qualities* that must be cultivated if we are to attain them.

Peace Education aims to bring a global perspective to education. However, it is possible for us to bear in mind that some cultures view the same customs and values in a different light. For example we in the Western world, teach our children to eat with a knife and fork, but in many Asian countries - people eat using only their right hands. *"Act locally, think globally"* says it most succinctly.

Peace education includes the idea of promoting the will to save the environment, while - at the same time - helping to develop a sense of social responsibility and solidarity with less privileged members of society.

The objectives of Peace and Environmental Education mean clearly that attention should be paid to method and to content. Objectives include knowledge, attitudes, values and skills. This can best be illustrated by consideration of appropriate curriculum objectives. A visual summary of such objectives is given in Figure 3 following Hicks's model (1988,13).

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SKILLS

1 Critical thinking
2 Co-operation
3 Empathy
4 Assertiveness
5 Conflict resolution

KNOWLEDGE

Issues to do with
1 Conflict   6 Power
2 Peace   7 Gender
3 War   8 Race
4 Nuclear   9 Ecology
  issues   10 Futures
5 Justice

ATTITUDES

1 Self-respect
2 Respect for others
3 Ecological concern
4 Open-mindedness
5 Vision

VALUES

1 Justice
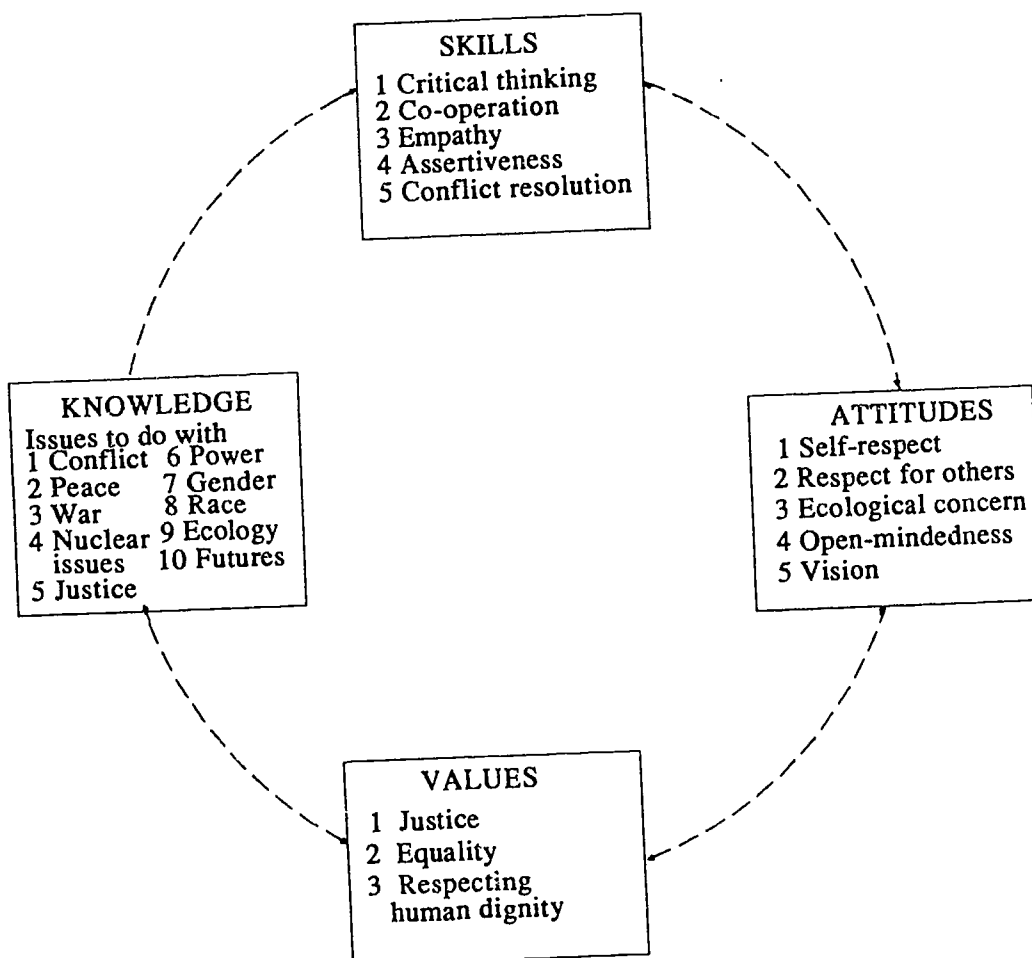2 Equality
3 Respecting
  human dignity

FIGURE 3. A visual summary of objectives, a revised version of Hicks'(1988, 13)
model

Together with the knowledge, attitudes and values, it is the skills that are the
essential core of education for peace and global responsibility.

One task of Peace and Environmental Education is to inform others about the existence of repression and economic exploitation, their causes and consequences, and the tremendous financial resources designated for military goals (about 2 trillion US dollars per a year). Providing such information is of little value, however, unless a person has a personal conviction as to the value of justice, equality and human dignity, which are the core premises of *moral development*. It is only then that the ability, the will to act on behalf of peace and justice and to oppose injustice can be born (Wahlström 1986).

Environmental Education organized by UNESCO in collaboration with UNEP in Tbilisi, USSR, in October 1977 endorsed the following goals, objectives and guiding principles for Environmental Education (see Environmental education module for in-service training of teachers and supervisors for primary schools UNESCO, environmental educational Series 6, 12-13). The goals are:

a) to foster clear awareness of, and concern about economic, social, political and ecological interdependence in urban and rural areas;
b) to provide every person with opporturnities to aqcuire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;
c) to create new patterns of behaviour of inviduals, groups and society as a whole towards the environment.

Environmental education must embrace the environment in its totality, material and man-made, ecological, political, economic, technological, social, legislative, cultural and aesthetic.

Environmental education should be an integral part of ongoing education in a wide variety of subject areas, and not a separate curriculum unit or speciality in itself. It should be interdisciplinary in approach. Listening to a long line of specialists is not enough.

Environmental education should be adapted to the needs of the learner, and must take account of the occupational and social roles toward which learners aspire. This enhances motivation to learn and helps them to envision better ways of doing their chosen work in the future. Environmental education should involve experiential learning and practical problem-solving processes. Passive learning is not enough (Schwass 1986, 37).

3.2. Objectives as educational tasks for personality development

The aims mentioned above could be translated into the language of developmental psychology. The Finnish UNESCO Committee (Anon. 1978, 15-16) have defined the aims of Peace Education, dividing them into socio-emo onal, cognitive, and behavioural objectives.

Socio-emotional objectives are:
- to embrace the ethics of human rights
- to enhance self-confidence
- to promote the ability to tolerate conflicts and changes
- to promote the willingness to promote justice and equality
- to promote the understanding and the respect of the different cultures, values, religions and ideologies
- to promote tolerance

Cognitive objectives are:
- to adopt a critical approach and develop reflective thinking
- to become familiar with the fundamental problems of humankind, and with the possible means of solving these problems
- to develop a many-sided and realistic picture of world affairs and natural phenomena
- to become conscious of the interdepence of nations and the importance of the environment
- to learn about the factors concerned with the development of prejudices, 'enemy image', and violence

Behavioral objectives are:

- the ability to act as a group member and to prefer constructive cooperation to destructive action
- the ability to act responsibly and to take others into consideration
- the ability to help and to act altruistically
- the ability to communicate in a strange environment
- the ability to justify and express one's opinion and listen to others
- the ability to act peacefully on personal and community levels.

Human being is an entity, where socio-emotional, cognitive and behavioral sides functions together at the same time. Peace Education aims to develop empathy and role-taking. Empathy and role-taking is to feel for other people. It is of crucial importance, however, to ensure that this empathy be extend⸱⸱ to include members of out-group: people of different nationality, race, ideology and belief from our own (Wahlström 1986). Empathy which concerns only members of one's ingroup is not a proper objective for peace and international education.

It is reasonable to assume that people whose empa⸱⸱ includes outgroup members will not easily succumb to indoctrination by propaganda that aims at instilling an image of the "enemy". Developing an image of the enemy is one of the most evident psychological preparations for warfare and armaments race (Wahlström 1989).

Peace Education is against rigid sex role socialization (Brock-Utne 1989). Culture in many countries connects masculinity and militaristic virtues: power-secting obedience, aggressiveness, and the denial of expressing weakness or tenderness. Changing this pattern of masculinity is an important task of peace and international education (Wahlström 1986).

The aims of Peace and International education are so comprehensive that it is necessary to apply a holistic and integrative approach to education. We must remember that Peace and Education is not about indoctrination or imposing an ideology on students. Peace and International Education is now considered to be an essential part of *ethical education* and the development of healty *self-esteem* and *critical consciousness.*

Habermas (1981) differentiates three generic areas in which human interest generates knowledge. These areas are " knowledge constitutive" because they determine categories of what we interpret as knowledge. They also determine the mode of discovering knowledge and for establishing whether knowledge claims are warranted. Habermas (1981) suggests three primary cognitive inte-rests - *the technical, the practical and the emancipatory.* There is no need here to explain the first two ones, but the promotion of emancipatory interests is important. To promote an *emancipatory interest* can be a basic skill to attain a critical, responsible and comprehensive thinking model. *Emancipatory interest* involves an interest in self-knowledge, that is the knowledge of reflection. Emancipation is from libidinal, institutional or environmental forces which limit our options and rational control over our lives and which have been taken for granted as beyond human control. Insights gained through critical self-awareness

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are emancipatory in the sense that at least one can recognize the correct rea-
sons for his or her problems. Though the discussion and ideas for development
for emancipatory interest is important for Peace and International education.

We could ask why we speak about Peace and Environmental Education, be-
cause all education should have the aims mentioned above. Peace and Environ-
mental education clearly defines the goals which are important for human rights,
justice and global survival and tries consciously to find the methods and con-
tents to attain these goals.

4. THE IMPLEMENTATION OF PEACE AND ENVIRONMENTAL EDUCATION

4.1. The contents of peace and environmental education

According to Freire (1972) learning must be tied to the life force of the learner. This places an invidual's personal growth as the core of the curriculum. By learning to perceive the social and political contradictions in their lives, people grow in awareness of their social reality and develop a capacity to transform it.

There are specific contents and themes which are important to include in the learning process. There are two important general topics for a teacher or coordinator; current events and environment.

If there is a war becoming imminent or going on then it is useful to discuss, reflect, or make a project concerning this issue. It is important to ask students to collect the news written in newspapers about ongoing conflicts and wars and then review and reflect on how true or false the news might be. To educate students to appreciate non-violence, it is good to ask their opinion, could the ongoing war have been prevented by peaceful means and which could have been real alternatives. It is good to ask them to calculate the real results of war, who won and at what price and who failed. The main question is, has an environment any vote in the war. And war does not only kill people, but nature, as well.

It is important to increase a student's knowledge and awareness of ecological systems via the direct interaction between him and the environment. This means that students should be exposed to the actual existing environmental problems as an integral part of their personal education (Kelny and Shackak 1987,449-458).

Canadian peace and world order studies for college and university level include the following courses in curriculum (Speier 1987):
   a. Militarism, The Arms race, and Arms Control
   b. Peacekeeping and Conflict Resolution
   c. World Political Economy and Economic Justice
   d. Society, Politics, and Violence
   e. International Law, Relations, and Organisations
   f. Human Rights and Social Justice
   g. Mass Communications, Society and Peace

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h. Women and The World Order

i. Religious Perspectives on Peace and Justice

j. Ecological Balance and The Environment

Peace studies are a relative newcomer to the college and university curriculum, but after the 1970's a dramatic change has occurred, and concern about ways of building more peaceful relations between people and nations has increased. The above list of contents is wide and a lot of literature is written about every theme. There is no lack of information or knowledge concerning the contents of peace and international education, the problem is to change the attitude of teachers and professors. This means that the topics of peace and international level should be included as professional themes, part of the ethics of every profession.

For children the list of the contents is naturally different including the following areas:

a. understand him or herself and own culture

b. understand and respect other cultures, religions, ideologies

c. learn to know and respect human rights

d. learn to know non-violent problem solving strategies

e. learn to know knowledge of ecosystem and environmental care

f. learn to know helping strategies

A basic element to understanding the cultural differences is to investigate first your own culture and its habits and compare them with some other culture. Students can compare dances, music, plays, religions and belief systems for example in different cultures. One other important content area is planning the future and the peaceful society.

Students should also learn to see the complexity of reality. Instead of using a black and white thinking model, varied phenomena are seen as being mixed and pluralistic rather than "good or bad". One can learn to notice that even so-called "evil" may be "good" under different circumstances or at a different time and on the contrary.

By rational discourse, students can find that phenomena are, in fact many-sided, and just looking at a situation from one point of view often gives an unfair picture. Violence and evil are the phenomena which are important to explore. A main subject for peace and international education can be found in

the UNESCO recommendation 1974:

> Education should include critical analysis of the historical and contemporary factors of an economic and political nature underlying the contradictions and tensions between countries, together with study of ways of overcoming these contradictions and tensions between countries, which are real impediments to understanding, true international co-operation and the development of world peace. Education should emphasize the true interests of monopolistic groups holding economic and political power, which practise exploitation and war.

4.2. Methods of peace and environmental education

4.2.1. General educational principles

The basic background for the methods (or pedagogy) of Peace and International Education springs from the results of scientific research into moral education, education for tolerance and co-operation, education for empathy and altruism, and environmental education.

Among the models suggested by curriculum professionals for Environment Education (see Kelny and Shachak 1987,450), the following four common components are suitable for peace and international education as well:

1. Interdisciplinary approach
2. Integrative learning process
3. Problem-solving approach
4. Use of the environment as a learning resource.

To implement these basic principles into educational practice means a creative change from teacher-centred education and one-sided authoritarian practice to new models of teaching.

The general pedagogic principles for peace and international education include the following:

1. Learner-centred education
2. Cooperation
3. Community-centred education
4. Equality between educator and students
5. Problem-centred education
6. Flexibility
7. Encouragement

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These general educational principles can be kept in mind using a different kind of orientation in teaching. In addition to those general principles, there are suggestions of some activities which are important in Peace and International Education (Bjerstedt 1985; Wahlström 1988):

- Encouraging students to imagine themselves in the place of others by means of role plays, role-taking, drama, etc.
- Activating students to develop their imagination in finding non-violent solutions to conflict situations.
- Providing students with the opportunities for role-taking
- Providing students with the opportunities for cooperation, shared decision-making and problem-solving and conflict resolution.
- Letting students disagree, avoiding one-sided authority
- Using of student's own questions and interests as starting points
- Exposure of students to admired models who behave altruistically
- Providing students with opportunities for giving help and responsible care for others
- Teaching students to see the beauty and the dignity of nature and to care for the environment
- Letting students plan, work, study or play according to their own ideas as much as possible
- Using rewards and positive guidance as much as possible and never using corporal punishment

Personality development takes place through experiences. Through these experiences, in problem situations, cognitive and emotional contents intermingle making possible the achievement of a real change in values and attitudes. Paolo Freire (1973,16) says: *"Responsibility cannot be acquired intellectually, but only through experience"*.

According to Bjerstedt (1988) it is important that the students become familiar with different ways of solving conflicts at school, and learn to give preference to peaceful solutions at both the individual and community levels. The students should be given opportunities to become acquainted with faulty prejudices and their backgrounds and to find ways to change them. Students should learn to realize that different problems have their historical causes and development which can be changed as a result of human decision-making.

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One of the most important principles is the honoring of the students' views, listening to them, giving them supportive attention and flexibility. Flexibility is important in peace pedagogy. Human life and action is never a straight and logical line.

The attitude of sympathy and encouragement is essential. Teachers show their appreciation to students when they respond and make suggestions even though these are often not realistic. Students learn to trust themselves when they feel that teachers listen to them. Students ought to use art, poetry, drama, role taking, music, dance, drafts, drawings, jokes cartoons etc as often as possible in their studies. They could try to find information on the topics from rumours, stories, fairy tales and not only from studybooks. Students could compare the information in textbooks and that which is existing in daily life.

Problem-centered learning process itself is important. The starting point is the leaner's own reality: his or her problems or curiosity. The more the educational process starts from students' own experiences, the better is the students' motivation and understanding. To know the meanings and practice of the *experiential* learning is useful for teachers (see e.g. Kolb 1984: Weil and McGill 1989), especially in adult education.

4.2.2. Experiential learning

Experiential learning has at least four different orientations (villages). Village three: experiential learning and social change is concerned with using learning from experience as the basis for group consciousness, community action and social change. A particular concern is how internalized dominant assumptions or ideologies in the wider society are recognized. Reflection on prior learning in this village is seen as a means towards personal and collective empowerment. The core ideas of experiential learning are: experience, reflection (re-vision), generalization, testing and empowerment (Weil & Mc Gill 1989).

The learning process starts with concrete experience discussed with others or independent reflection. Reflection based on concerete experience and observation is a crucial part of learning process.

After the reflection the process is aimed for abstract conceptualization and generalization, experimentation, and testing. Experimentation could be described as action plans or planning for the future (Henry 1989, 26).

Kolb's idea can be implemented as one example of different orientations in Peace and Environmental Education, especially in adult education. Individuals are enabled to make sense of their personal stories by making links between autobiography, group history and social and political processes (Weil & Mc Gill et al. 1989, 12). Education for peace and environmental responsibility is to create understanding of personal experiences and reflection on power systems of society. Experiential learning is one of those valid tools for this kind of learning process.

There are a lot of different methods where experience, reflection, generalization and asking processes are included. In environmental education values clarification is a widely accepted strategy.

The main objective of value analysis is to help learners apply this form of investigation to values exploration and decision making in their own lives. Through the experience of a values analysis exercise, learners should become more competent at integrating and conceptualizing their values.

There are two commonly used methods in values analysis. One involves the presentation of an incident or moral dilemma that evokes a value question. A role-playing exercise may also be used. The role of the teacher is to involve the learners' values in the values analysis exercise and to function as a non-evaluative, supportive, and active listener for the underlying meaning of learner discourse. A well conducted exercise encourages learners to gain insight into values and to establish an empathetic relationship with others in a situation where there is a value conflict.

Values analysis exercises consist of six basic steps:
- identifying and clarifying the value question by defining terms and providing examples
- assembling (gathering and organizing) facts relevant to the value question
- assessing the truth of these facts
- clarifying the relevance of the facts to the value question
- arriving at a tentative value decision
- determining whether or not the decision is acceptable.

Values clarification methodologies include role playing, games and simulations of real-life situations, in-depth self analysis exercises, out-of-class activities, and small group discussion.

Judgment is to be avoided. In the course of discussion the teacher should not make substantive statements, should only ask questions and hold judgment

until the end. (Caduto 1983.)

4.2.3. Cooperative learning

> *"Certainly, aggressiveness exists in nature, but there is also a healthy non-ruthless competition, and there exist very strong drives toward social and cooperative behaviour. These forces do not operate independently but together, as a whole, and the evidence strongly indicates that, in the social and biological development of all living creatures, of all these drives, the drive to cooperation is the most dominant, and biologically the most important....It is probable that man owes more to the operation of this principle than to any other in his own biological and social evolution."*
> *Ashley Montagu (1966, 23.)*

Research supports the claim that cooperative learning reduces prejudice. Practicing cooperation is conducive to cooperation - the polar opposite of prejudice. (Conard 1988, 283).

Cooperative learning is a teaching technique that makes it possible for students to get to know one another well enough for similarities of beliefs and values to override considerations of race and religion.

The Johnsons also found that cooperative learning experiences promote greater acceptance of differences and interpersonal attraction among students from different ethnic backgrounds and among handicapped and nonhandicapped students. Putting students in cooperative contact, who might not ordinarily seek such interactions, and having them work cooperatively, moves students beyond initial prejudices toward other students to multidimensional views of one another. Furthermore, such experiences allow them to deal with each other as fellow students rather than as stereotypes. (Johnson & Johnson 1985, 23.)

Cooperative learning is one "tool" to develop the skill for non-violence. Deutsch says: "*Although the concept of cooperative learning is simple, its practice is not. Changing a classroom or a school so that cooperative learning is emphasized is a complex and long-term process, and it requires the teachers to learn many new skills*". He continues: :"That cooperative learning does not prepare for the adult world is often heard, but I would consider that a myth. In fact, the ability of people to work cooperatively is crucial to building and maintaining stable marriages, families, work careers, communities, and a peaceful world. And the issue is not to eliminate competition and individualism but to provide a more appropriate balance with cooperation". (Bjerstedt 1990, 533-54.)

The modern world is overloaded with games and plays which have losers and winners. This kind of tradition teaches us to see enemies and ourselves as losers or winners.

One of the basic elements in cooperative learning is positive interdependence. Students perceive that it is to their advantage, if other students learn well. This can be achieved in various ways, for example, by emphasizing mutual goals and by giving joint rewards. Cooperative learning should also involve providing students with the time and procedures for "processing", analyzing how well their groups function and what can be done to improve how they work together. The three basic elements of cooperative learning are the following (Johnson & Johnson 1987,13-14):

1. *Positive interdependence.* Students must perceive that they sink or swim together. This may be achieved through mutual goals (goal interdependence), division of labor (task interdependence); dividing materials, resources, or information among group members (resource interdependence); assigning students differing roles (role interdependence); and by giving joint rewards (reward interdependence). In order for a learning situation to be cooperative, students must perceive that they are positively interdependent upon other members of their learning group.

2. *Invidual accountability.* Every group member is responsible for learning the material. The purpose of a learning situation is to maximize the achievement of each invidual student. Determining the level of mastery of each student can help to provide approriate support and assistance to each.

3. *Interpersonal and small-group skills.* Students must be taught the social skills needed for collaboration, and they must be motivated to use them. Students must also be given the time and procedures for analyzing how well their learning groups are functioning and the extent to which students are employing their social skills to help all group members to achieve and maintain effective working relationships within the group.

In cooperative learning each student is given feedback on his or her progress, and the group is given feedback on how each member is progressing so that the other group members know whom to help and encourage. All members share responsibility for performing leadership actions in the group (role-taking practi-

ce). Responsibility for each other's learning is shared. Group members are expected to provide help and encouragement to each other in order to ensure that all members complete the assigned work. In traditional learning groups, members are seldom held responsible for each other's learning.

The social skills (such as leadership, ability to communicate, to trust one another and to manage conflict) are taught directly. The teacher observes the groups, analyzes the problems they have working together and gives feedback to each group on how well they are managing the group task. The teacher structures procedures for groups to "process" how effectively they are working.

Cooperative learning should also involve providing students with the time and procedures for processing: analyzing how well their groups function and what can be done to improve and how they work together (Deutsch 1989,7).

Cooperative learning activities often include helping activities. Helping others to learn by cooperation is a basic idea. It must kept in mind that helping activities are introduced in ways that are not unduly coercive, and that do not create resistance or resentment. Good examples are cross-age and same-age tutoring and care of plants and pets. Cooperative learning methods supplemented by some excellent ideas from Celestine Freire can be a real 'peace pedagogy'.

Freinet pedagogy is one of those practical educational developments which have much to give to Peace and Environmental Education at school level. Freinet (1975) has written that education should aim to create people to make a better world. Freinet (1975) suggests the importance of *the students' self-planning and feedback process* in learning activities.

The basic idea of Freinet - pedagogy is to use work as a pedagogical tool. Work means different kind of activities students are doing at school. It means that students can themselves do much more independently than in teacher-centered education. Students plan the week programme, they evaluate every week the good and bad of their work during the week. At the end of the study week students give themselves feedback; they evaluate how they have advanced and how they can improve their learning.

Students write classpapers and even little textbooks concerning their interest areas. They have a special school walks (as Freinet called them) in the surrounding of the schoolbuilding learning the phenomena of the nature. Students visit different kinds of organizations of the society: museums, libraries, offices etc. to get to know how society is functioning. Students make a contract, agreement, what they are going to do during the week. Teacher and students sign

that agreement. At Freinet schools there are workshops for different kinds of activities, drama, art, cooking, natural sciences etc. Freinet-pedagogy has a rich variation of activities where students become independent learners and actors.

4.2.4. Flexible use of different methods and practices

No method or pedagogic principle works always and in every situation. It is wise to pay attention to students' ideas and capacity and to select the suitable way of teaching according to that. As the reader has noticed, all the different methods presented here respect students' ideas and opinions and experiences. Coordinated by the teacher, these experiences make students feel that they can plan, decide and take real responsibilities. There are a lot of practical variations to use the ideas of Freinet-pedagogy, cooperative learning and experiential learning.

In the Peace and International education project in Jyväskylä, school classes selected together the learning methods. To give some examples: a) The students in pairs planned how to learn, in which time and on which days of the week. The students decided to devote one day for only one subject (e.g. for maths) and the following day for another subject. b) In pairs they taught maths to each other and the teacher was there to provide help if asked. c) The students in pairs invented a math puzzle for each other. d) The students in pairs invented a puzzle for learning basic new words concerning their lessons from the textbook. e) The students made an interview project, interviewing the staff of the school cleaners, schoolnurse etc. f) The group of students taught aerobics to other students. The teacher was only looking and following the students' model and instructions.

Flexibility means creativity and trusting the students. In the peace and international project it was found that the flexible use of different methods worked well. Students evaluated their learning processes and gave feedback to the teacher, writing comments on what they had experienced. Students wrote, that it was meaningful to think themselves how to plan their learning process together with their pair. They wrote, that it was great to learn planning and taking responsibility for the plan they have made. It is a typical fault in education, that the educator, or teacher, plans alone, what he or she is going to do with students. It is important to include the planning process as a part of the learning process.

5. PROMOTING MORAL GROWTH

There is a strong connection between Peace and Environmental Education and moral development. Peace and Environmental Education is education for moral development. Caduto (1983b) writes that environmental education uses the methods created for moral education.

In Van IJzendoorn's study (1985) the level of moral judgment of young and adult Dutchmen was related to anti-nuclear activism and concern about nuclear war. In my study (Wahlström 1986) the level of moral judgment was related to the attitudes of young Finnish students towards peaceful solutions and activity for peace. According to Kohlberg (1976), morality is a natural product of universal human concern for justice, for reciprocity and equality in the relations of one person to another. Gilligan (1982) deepens Kohlberg's thinking from a woman's point of view. In morality important aspects are caring, compassion and protection. According to Gilligan, moral development proceeds through three stages: *caring for self, caring for others, caring for self and others,* which roughly parallel Kohlberg's stages, but with different outcomes. The ethical development emerges as care and responsibility, which represents the female voice, and is rooted in differences in manner in which boys and girls resolve identity issues in adolescence. For boys, separation and individuation represent mature solutions of the identity crisis; for girls, attachment, that is, the formation of relationships, is the mature solution.

The philosophy of moral development states that the moral growth of an individual occurs in progressive stages. Learners are to be aided in this process by being exposed to moral conflict situations and to other individuals who are functioning at a higher level of moral reasoning. Moral dilemmas are introduced that require the use of moral reasoning lying just beyond the learners 's present level of functioning. These dilemmas create internal dissatisfaction that stimulates moral growth. The highest level of moral reasoning is based on the universal ethical principles of *justice, equality and respect of human dignity* (Kohlberg, 1973, 1981).

Kohlberg and Turnie! (1976) outline several responsibilities that are important for each teacher to fulfill, if one wants to provide effective moral education:

1. knowing the student's stage of functioning in moral reasoning
2. exposing the student to a stage one step above the student's own level of thinking
3. exposing the student to problematic situations that pose genuine moral conflict and disagreement;
4. creating an atmosphere of interchance and moral dialogue in which conflicting moral views are compared in an open manner.

Role-taking ability is essential in moral development and in tolerant attitudes. Flavell (1974) has written that it is useful to start with a four-phased model, which illustrates the development of role-playing ability. These four phases are:

a) existence: to be aware that another person may have a different view point
b) the need: an attempt to define the other person's different way of thinking
c) the ability to define this viewpoint
d) application: the ability to utilize the other person's different point of view for changing one's own attitude.

As an exercise to promote moral growth, a teacher can give examples of moral dilemmas to be discussed with students. The moral dilemmas could be any kind of examples of daily life experiences of students or examples from literature, art, personal histories, newspaper articles etc. The role-taking ability also requires the ability to apply the other person's point of view to one's own thinking and activity, which presupposes the respecting of him as an equal person. Reimer, Paolitto and Hersch (1979, 211-213) affirm that moral discussions are an important tool in moral education.

Equality and justice are universal moral principles that can be developed in the human mind. The individual has the ability to develop morally to a level where respect for human dignity and justice becomes a self-chosen ethical principle. We want the principles of abstract justice to apply, but we all want to enjoy situations where there is gross partiality - in our favor. Living in our complex social system, we are all aware of the tension between these two demands and between the ways in which any social system seeks to mediate them. It is deeply human to have a need for justice. Justice is related to social conditions (see Figure 5).

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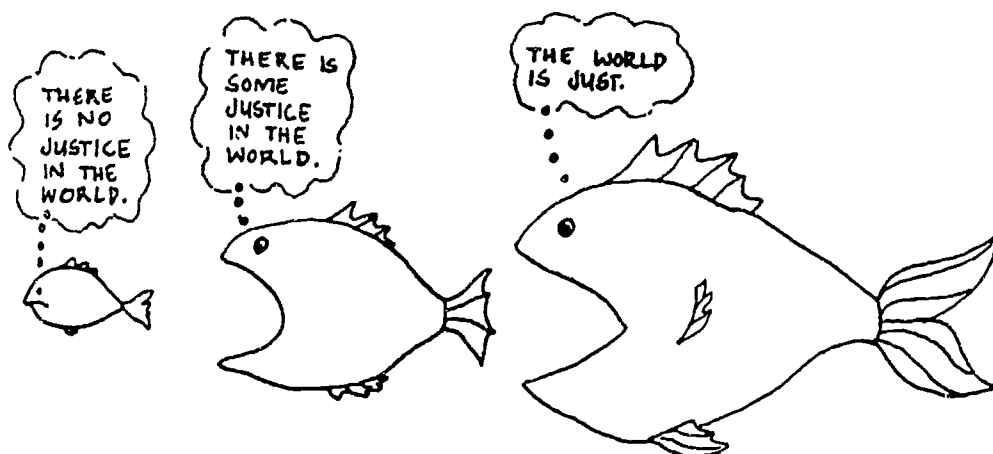
FIGURE 4. The just-world phenomenon (According to a drawning by Mankoff:©
1981 The New Yorker Magazine. Inc. by Anne Pellinen).

The picture gives a view of why all people may not have this sense of justice
and equality as a self-chosen moral principle. It is a task of education to inc-
rease the need of justice. Promoting moral values means a realization that
certain kinds of interaction are more conducive to this development than others.
Trust between students and teacher is essential. Psychological equality between
students and teacher is a core idea in peace education and in promotion of
moral values.

As violence creates more violence, justice and equality create more justice
and equality. This is possible when the educational process takes the form of a
dialogue between the educator and the student, according to the pedagogic
principles by Freire (1972).

The teacher is not a "teacher", but a coordinator, helping students to in-
vent, create, work and search for knowledge in groups of varying sizes and in
different kinds of projects.

The teacher is a coordinator while the students are playing, inventing new ideas, finding out possibilities to diminish negatives such as pollution, selfishness and inequalities.

Morality is not a matter of words or values. It involves our emotions and commitments. We have moral feelings. Habermas (1990) says:

> Feelings form the basis of our own perception that something is moral. Anyone who is blind to moral phenomena has blind feelings. He lacks the sensor, as we would say, for the suffering of a vulnerable creature which has a right to the protection of both its physical self and its identity. And this sensor is clearly closely related to sympathy and empathy.
>
> Secondly, and most importantly, as you rightly observe, moral feelings guide us in our judgement of particular moral instances. Feelings are the experiential basis of our first intuitive judgements.

Morality involves what we do, how we behave and what decisions we make. Students need to become moral actors, not simply moral talkers. Education for peace means that human beings do something for peace, not only have the values for peace.

6. GROWTH FOR TOLERANCE

According to Allport (1954), people divide the world into two groups, ingroup and outgroup. The ingroup is own family, race, ethnic group or religious group. Belonging to ones own ingroup (or ethnicity) is important and a powerful emoti- on of the human mind. Different outgroups can live and usually live in peaceful co-existence. Allport (1954, 40) writes:

> Psychologically emphasis must be placed primarily on the desire for securi- ty, not on hostility itself. One's own family is an ingroup ; and by definition all other families on the street are outgroups; but seldom do they clash. Hostility toward outgroups helps strengthen our sense of belon- ging, but it is not required.

Allport writes about the world-loyalty, arguing that there is no intrinsic reason why humankind could not constitute an ingroup. He suggests that there is no intrinsic reason why belonging to the human race could not have the same effect as belonging to other ingroups such as family, race or nation (Allport 1954,42). The structure of the personality is so complex that it is easy for a human being to identify with all humankind, society, ethnic group and family at the same time (Dasdamirov 1977). The social-psychological findings tell us that it is possible to educate human beings to be world-citizens. This does not mean neglecting the respect of a person's national identity. There is no real obstacle to create human beings who are at the same time national and world-citizens.

There are two important features which have an impact on tolerance. They are self-esteem and values. If a person suffers from low self-esteem, he/ she is more likely prejudiced or, on the other hand, might overrespect the outgroup members (Pettigrew 1981). It has been shown that prejudiced people tend to have parents who imposed rigid convential rules of conduct on their children. The rules, for example, prohibited aggression and hostility toward one's parents. All anti-social impulses such as hostility were severely punished. Children got low self-esteem because that kind of conduct means that their own hopes and emotions were neglected. Very often that kind of people project those negative impulses onto others (Aboud 1988,220). In a stratified society different ethnic groups have different status, and prejudices are usually projected to those who have the lowest position or to those groups who are in competition with each other. If we want to increase tolerance in society, the promoting of equality and opposing competition are important processes. The more there are different groups with very low status and heavily competitive groups, the more there are

possibilities for prejudices.

Prejudices and fear of strangers are very human feelings. Prejudices could even turn out to become enemy images. Enemy image means dehumanization, up to the point that somebody is not any more "human", and it is right even to kill him or her. The more tolerant we are, the more resistant we can be to creating an enemy image in our mind.

Ostermann and Nicklas (1984) have pointed out how important it is to be *conscious of one's own prejudices and enemy images.* To be self-conscious about our own racist and prejudiced attitudes is the start of getting rid of enemy images and racism. The most dangerous prejudice is that you do not have any prejudices. We know that all the images in the human mind are connected with political, ideological and religious realities and their historical changes.

The enemy image is a result of militarization of the human mind. The formation of enemy image is one antecedent of warfare between nations and fighting groups. Nations and groups preparing themselves to make war do not perceive themselves as acting aggressively, but as acting defensively. Goldstein writes (1986, 182): *"People believe their nation is acting rationally and with good intentions when it engages in warfare. Each see its opponent as acting irrationally and unjustly. It is never we who are aggressive and unreasonable, but because of their hostility we must act defensively".*

According to Reardon (1988) it is important to remember that human beings are usually persuaded to fight wars against "enemies", and enemies are always different, the difference being perceived as negative, or evil. Enemy images are born in these negative notions of others, nurtured by stereotypes that reduce others to a few negative characteristics, and fortified by prejudices that deny the others their full humanity. Reardon suggests that these images, stereotypes, and prejudices are easily manipulated, because they are so simple. People are readily persuaded to deny virtually all rights to the " enemy", including the right to live."

The formation of an enemy image is characterized by dualistic thinking, which induces people to view different kinds of morals, values, ideologies and religions as " right" or " wrong", and people as "good" or " bad". The enemy image represents the view that the ingroup feels threatened by an outgroup. The enemy is first of all perceived as alien, but not all strangers or unknowns are perceived as enemies. If the stranger is seen as threatening the religious, political, ethnical and ideological values that are important to one's own identity,

one may be perceived as an enemy (Wahlström 1989).

Our nationalistic identity is often connected with the legitimation of being right, our values are sacred. Human adaptation to the world is largely through learning, rather than by means of instinct. War as a social institution, for example, cannot be innate nor is the creation of enemy images or prejudices; they should be seen as one of our socio-culturally learned ideas and images. The enemy image is a result of the cultural pollution. Abolishing enemy images is a question of cultural changes and education.

There is an illusion that the teacher is neutral and never includes any kind of prejudice into her or his teaching. There is very often a hidden racism and prejudism to be found in teaching practice. One teacher said in her class:" I am so happy that all my friends are white." This is racist teaching. A black girl in her class cried at home and told this event to her mother.

Hidden racism can be found even in textbooks and in stories.

In one English textbook used previously in Nigeria there was the following story:

Mr. Winston is a British man.

He has a friend called Alao.

Alao is an African.

Mr. Winston is a doctor.

His friend Alao is a farmer.

Mr Winston always cures Alao, whenever Alao is ill.

Alao is grateful to Mr. Winston.

A Nigerian researcher Kolawole Raheem has changed this original text as follows:

Mr. Winston is a British man.

He has a friend called Mr. Alao.

Mr. Alao is a Nigerian.

Mr. Winston is a medical doctor.

Mr. Alao is a farmer.

Mr. Winston always sends medicine to Mr. Alao to use against fever.

Mr. Alao always sends food crops to Mr. Winston to eat.

They are really good friends.

And they are grateful to each other.

Brandt (1986, 140) proposes the following ideas for syllabus contents of anti-

racist teaching. In selecting new or restructured syllabus contents, it would seem that there are a number of questions teachers need to ask themselves, for example:

Does this syllabus represent a global view?

Does it open up opportunities for the development of a global analysis of local and national events?

Does it relate to students' experience in any way? Does it offer an interactive an dynamic approach to phenomena?

Does it challenge racially defined phenomena and phenomena that seek to perpetuate the dominant power relations within society?

Does it open up the opportunity for students' critical engagement with the subject matter?

Will it help to further stimulate students' critical powers?

Does it provide the opportunity for students to extrapolate ways of challenging bias, racism, sexism, class domination and other forms of oppression?

Does it address itself specifically to any, all or some of the 'building' blocks of racism and other forms of oppression?

Does it positively acknowledge the history of struggle of the Black and other oppressed people against their oppression?

Does it contribute towards the overall aims of equality, justice and emancipation?

It has been noticed that it is also important to give facts about different cultures. But if the teacher is only "giving " facts, this is not enough to diminish prejudices. It is important that the teacher is intermediating *positive, reflective attitudes* concerning the foreign cultures and their customs. By telling about the historical- cultural roots and by explaining the functions and reasons of different customs of different cultures, the teacher is creating a base for positive, reflective attitudes. Using different methods, role-taking, drama etc, students can emotionally feel and intellectually understand the meanings of different life habits. The following pedagogical principles are useful for developing tolerance:

promote an open atmosphere

set a tune of acceptance for students' opinions

let students voice all their prejudices and f. irs and give them possibilities to reflect their experiences concerning their prejudices.

Let your students reflect and ask them to give examples of the following basic human phenomena: "People do not believe what they see, but they see what they believe " or in another words: "Images are many times much more powerful than facing the reality." If students can understand this, they start to realize how easy it is to create enemy images and hostilities between two groups.

In Frances Aboud's book (1988, 130-131) a curriculum unit called 'More Than Meets the Eye' is presented as activity in education for tolerance. The unit More Than Meets the Eye consists of three sections:

Understanding yourself, understanding others and understanding differences. The first two sections give the children practice at emphasizing internal qualities and at differentiating members within groups. The third section gives children practice in detecting, explaining and generating examples of occasions when different perspectives are valid.

Understanding Yourself is the title of the first set of activities. These activities give the children practice at emphasizing internal qualities and at differentiating members within their own ethnic group. For example, the children first complete their own personal profile, including external features such as height and colouring and internal qualities su h as abilities, emotions and preferences. They then compare their profile with that of a friend and a lesser-known classmate to note similarities and differences. The teacher asks them to identify qualities in others that are either strange and unlikable or pleasantly surprising. The children then discuss these reactions and how one can learn to accept both kinds of qualities and reactions.

Understanding others is the title of the second set of activities. These activities give the children practice at emphasizing internal qualities and at differentiating between members of the same ethnic group. However, this time the focus is on children from several different ethnic groups, collectively called the Hoozhoo Kids.

A number of games are offered in which children practice associating names of the Hoozhoo Kids with their faces, and with their profiles. For example, children are given black and white pictures of each Kid showing only half the face. They must draw in the other half and write the name underneath. A crossword puzzle of Kids' names can be completed using clues which describe something about the Kid's personality, preferences or abilities.

Finally, the section entitled *Understanding Differences* consists of a set of activities which give children practice at identifying, explaining and generating

their own examples of instances where two different perspectives are both valid. Discussion focuses on how ethnic group and individual characteristics can explain these different perspectives. In contrast, there are other instances where society does not respect differing points of view, and for these instances we have rules. Some activities deal with ways in which the student's feelings differ from other family members and friends, and ways in which the student's feelings differ from members of other ethnic groups.

It is important for students to understand that some differences are impossible to change and they are inherited. For example, color of the skin, nobody can change that. When students learn to understand, they learn to know that it is very unjustified to be racist. According to Aboud (1988), 8-10- year- old children are very sensitive to understanding this kind of basic questions. They are also sensitive to understanding that in spite of differences two different groups can live in peace.

Education for tolerance involves activities such as trust games, role playing, encounters and simulation. Students could invent other similar plays.

It has been noticed that *equal, genuine, real friendship* contacts with foreigners or minority groups diminish prejudices (Wrightsman 1972). All friendship relationships (twin schools, twinclasses etc) are important to give students possibilities to create genuine, real contacts.

In the Peace and International Education project some school classes have friendship relationships with an old man. The old man visited the school and told pupils what kind of life he had got when he started his school. The first grade pupils (7 years olds) were listening to him and then they presented a theater play to him. Some classes have a friendship relationship with the handicapped and some classes corresponded and sent money to a poor Indian girl. The whole school has a friendship school in Tanzania. The practical possibilities are many and the friendship arrangements are a suitable educational idea for colleges, universities and vocational training.

In a Dutch peace education project, a hundred Dutch towns have decided to offer in their local school an exhibition called "The scapegoat". The exhibition explains and illustrates, in the first place, the basic mechanisms responsible for prejudices, discrimination and racism, both in private life and society, and, in the second place, the links that exist between three mechanisms on different levels (daily life, national and international).

There are six different themes, each with its own mission:

1. Being different (differences and similarities)
2. Images and prejudices (fact and opinion)
3. Generalisations and stereotypes (true and false)
4. Discrimination (the scapegoat mechanism)
5. Enemies (Us vs. Them)
6. Racism and facism (equality and inequality).

This idea for making an exhibition could be adopted by using teamwork, cooperative learning or, if there are young or adult learners, by experiential learning method. While processing these topics students can have a possibility to understand their own prejudices and fears.

An interesting and theoretically advanced model for reducing prejudices is Barbara Taylor school Educational Model. Two psychological traditions inform the model; Vygotsky's theory of learning and development and Social Therapy clinical direction.

The Educational model helps children develop by focusing on the three barriers to their development:

1. The "Isms": Racism, sexism, classism, anti-Semitism, homophobia, and so on, are more than psychological states or attitudes to which particular individuals hold; they are social institutions deeply embedded in the fabric of this society. Children learn (a) the sociohistorical origins and nature of the isms, (b) to develop ways of relating collectively to minimize discriminatory behaviors and attitudes, and (c) to avoid self-destructive and antisocial reactions to such behaviors and attitudes.

2. The Avoidance of Emotionality: In the traditional classroom, emotions are "off-limits"; that is, learning generally is perceived as a purely intellectual process, and children are supposed to leave their feelings at the classroom door. This theory and practice distort the actual learning process and hinder children's development and learning. If children are not allowed to develop and express their emotions in a nonthreatening and nonjudgmental environment, they consequently will "act out," repress, or even stultify their feelings inappropriately. The model emphasizes the importance of emotions in the learning process.

3. Abuse: The epidemic of sexual, physical, verbal, substance, and other abuses can be dealt with most effectively, if ordinary people learn ways to combat them in their everyday lives. The optimal learning environment in the face of such an epidemic is one that maximizes children's

development as changers of their environment. Self-esteem, which is so important to the learning process, grows to the extent that one is actively involved in changing the conditions of one's life. This process involves children as well, for they learn abusive and antisocial ways of relating to adults and to each other at remarkably early ages. The schoolwide social issues curriculum, with its collective learning model of classroom teaching, combined with the school's "Stop Abusive Behavior Project," is aimed at breaking the abuser-abused paradigm and at helping children intervene in abusive and potentially abusive situations.

The method is not didactic; it utilizes a collective learning, critical thinking, and social therapeutic approach. The essential theoretical premises of the model are:

1. Both learning and development are sociohistorical processes, not internal or individualistic ones.

2. Learning is not dependent on developmental level; rather, it leads development.

3. The most effective educational environment is one that focuses on development, not on learning; that teaches beyond developmental level; and that makes the sociohistorical processes of learning and development congruent with practice. (This is accomplished through the collective reorganization of the processes of learning and development.)

4. Human development is the expression of the collective capacity to produce change. Under current conditions of profound inequality and underdevelopment, development entails breaking the barriers to development so that one is able to successfully negotiate in a racist, sexist, homophobic, individualistic, and commodified society without being devastated, victimized, and disempowered.

5. The isms are social practices which (a) are embedded in the institutions of the American society and (b) greatly contribute to the underdevelopment of all children.

6. A developmental educational practice is one that undoes under-development. Essential to this is the process of helping children to develop ways of relating that counter the isms through collective socialization.

7. Conflicts are social and they stem from basic contradictions in society. Conflicts can be a powerful source of children's growth and development if the origins and bases of their emotional responses to conflict

are socialized.

Most teachers are reluctant to address racism, sexism, and classism directly; instead, they either deny that such elements exist in their classrooms ("little children are colorblind") or they try to create an atmosphere free of them. It is understandable that teachers would feel this way; they have not been trained to address such emotionally charged issues. In addition, teachers' fear of talking about the isms with children and youth has to do with not only how teachers perceive their role but also with how they understand children and the processes of learning and development (Strickland & Holzman 1989, 385-394).

Most religions teach their own doctrine of absolute and final truth. To believe in one's faith may mean having to believe that all other doctrines and the individuals who believe in them are in error.

Thinking critically and reflecting own beliefs does not mean to abandon one's own religion. But learning to think critically gives a tool against a rigid prejudiced mind.

Thinking critically is the antithesis of prejudicial thinking. It is, as Robert Ennis (1983) defines it, "reasonably going about deciding what to do or believe. "This means that cne's beliefs - and consequently one's actions - are grounded in reasoned judgment, in thorough examination, in solid evidence.

Thinking critically begins with beind disposed to question, to examine, to suspend judgment, until the available evidence is weighed.

If we teach our children to (1) ask questions, (2) go beyond the superficial to the substance, (3) take positions on issues and explain and defend those positions, (4) be aware of multiple perspectives on important issues and the importance of knowing all sides of an issue before taking a position, and (5) assess information carefully and fairly, they will increase their awareness of their own biases, heighten their openness to rethinking their positions in the face of conflicting evidence, and take time to reflect, rather than merely react (Wahls 1988 280-282).

Using a cooperative learning method and including a critical thinking aspect in our teaching we can hope that some day the humanity move toward a non-prejudiced society.

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Suggested **activities:**

1. A role-play in which students choose to become refugees and have to leave their country. They get a passport (in a play) and those who become refuges have to rip their passport, pack their things and leave the class and be in the position of a refugee. The play could continue like this: Refugee students come back into the classroom and pretend not to understand any word of what others are speaking and they speak a language the others do not understand. Student can create more similar ideas.

2. Fantasy trip: I am a refugee. Students write, how they feel when they have to leave everything, home, friends etc. They are asked to imagine, how one feels after leaving everything behind.

3. A study project about one of your country's ethnic groups or other minority groups (religious, political, etc.). Let your students make a study of the similarities and differences of this group and your group. Ask them to relate the positive aspects of this group and also those they might be afraid of. Have a deep discussion or role-play situation about those qualities your students seem to be afraid of. It is good to discuss those minority groups students seem to be afraid of.

4. Let your students arrange an exhibition about the culture of that group and present the exhibition to others, e.g. to younger ones. Invite the members of that group to your school or institution to talk about their lives, and collect different kinds of books or booklets about this group. Try to find out if anyone has a friend from this group and ask that student to talk about the friendship.

5. Let your students visit the cultural places of that group, e.g. churches - and ask them to write an essay about the visit or arrange a round table discussion in the class.

6. Let your students explore how the mass media (TV films, videos, movies, computer games etc) are creating enemy images or prejudiced images. It has been shown that the crook in nearly every movie is a colored or black person and belongs to a lower social class.

7. A study project about cultural differences to let students identify with people of other cultures. One teaching unit could be to research how people say in different cultures "how do you do?". Students could explore this by asking their parents, friends or relatives, by reading, watching films etc. After their research, the students could play a game of saying "How do you do" in different ways. They could even find explanations from the cultural history of why certain nations say "How do you do?" in their particular way.
   There are many other ideas suitable for this model, e.g. how different cultures show their joy, how they eat, how they behave as men and women, how they treat their elderly people, how they care for their babies, etc. It is important that the teacher does not merely tell the students about all these differences, but that the students explore and research for themselves.

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8. Students can collect different kind of wisdoms or idioms of minority groups and discuss what these idioms have to say to people of our time.

9. After arranging for a friendship school in another country (or preschool or orphanage) the school can arrange a whole year project studying the culture of the country where the friendship school is.

10. Students visit institutions for old or handicapped people and invite old people to visit schools and make a friendship relations with handicapped and old people.

11. Friendship and twin relations are important "tools" to diminish prejudices. Friendship schools or classes and all kinds of solidarity projects, etc. are useful activities for learning tolerance and international understanding. But it must kept in mind that those relationship should base on mutual respect and equality. If western people take an attitude that we are the best and we come from the best culture and belief system and we help you, the relationship is not equal. We sometimes forget in the western world that we always learn something new and valuable from other cultures, if we respect them.

7. PROMOTING EMPATHY AND ALTRUISM

Inducing students to become altruistic with respect to others is one important task of peace education. Altruism is behaviour carried out to benefit another person without anticipation of rewards from external sources. Empathy is essential for altruism. Unless the actor responds empathically to social cues conveying another person's experience (or to cognitive representation of another's experience), the behaviour cannot be called altruistic.

All social behaviour is the product of an interaction between the impacts of current events and prior learning. Autonomous altruism is motivated by inner concerns because commonly no social rewards can be anticipated: the very opposite is more likely. The rescuer risks being killed and the anti-war demonstrator risks being imprisoned.

According to research results there is evidence that children who are induced to help others, or who are given responsibility for others, subsequently exhibit spontaneous prosocial behavior. If helping activities are introduced in ways that are not unduly coercive, and that do not create resistance or resentment, children can learn the relevant skills. They can learn that they are competent to help, and can begin to see themselves as valuable contributors to an interdependent social system (Johnson & Johnson 1987).

According to research, those who have committed themselves to work for civil rights have got a special kind of learning experience. They have learned, by loving precept and percept, to respond easily to the needs of others. Such a response is called forth, as it were, by a structure of perceptions of the environment. They were very much influenced by learnings from the past. These learnings consisted not merely of moral precepts, but also percepts. They were not only to believe but to do. Such doing often stigmatized them, and was costly in terms of personal risk and effort. They sustained ability to tolerate high costs and low payoffs, all on behalf on others (Macaulay & Berkowitz: 1970, 267).

Hoffman's (1977) suggestions for four hypotheses that may help to foster altruistic motivation are following:

   a) Allowing the student to have the normal run of distress experiences rather than shielding him from them.

   b) Providing the student with opporturnities for role-taking and for helping and responsible care for others.

c) Encouraging the child to imagine himself in the place of others

d) Exposure for a long time to loved models who behave altruistically.

The golden mean of promoting moral growth seems to be reasonable. According to Peters, if the parents and teachers are too authoritarian and punitive we are likely to get inviduals who are indoctrinated or crippled with irrational guilt (Peters 1981,174, 181). Trusting childrens' and students' own normal "goodness" and empathic capacity is important.

John Rawls' (1971) thesis is that a necessary condition of moral feelings of shame, remorse and guilt is the existence of natural attitudes such as self-esteem, compassion and love. We could not, for instance, understand what shame was unless we also had a concept of self-esteem; for self-esteem includes the disposition to feel shame in certain circumstances. Similarly love is exhibited in a tendency to feel guilt or remorse in certain circumstances.

Macaulay and Berkowit (1970) suggest when children learn to experience each other's feelings empathically or vicariously (when there is "coupling of potentially reinforcing changes of affectivity to social cues about the experience of others") they will behave in a truly altruistic fashion. Generous models increase generosity and selfish models increase selfishness.

It is human to have the ideal that other people should not be hurt and we can get psychological pain for hurting somebody or seeing or knowing of somebody being hurt (Macaulay and Berkowith 1970).

An example of student participation in community life is found in a project initiated by the Philippines at Abano Pilot Elementary School. This project was entitled 'Getting Involved in the National Green Revolution Campaign', and it focused on promotion of a better life through understanding and respect for all peoples. The project was carried out from October 1979 to March 1980 and involved 1,506 students. Some examples of the broad range of possibilities for related activities include:

1. Participating in the campaign for home and community beautification.

2. Growing simple plants and learning that living plants need light, water, soil and air.

3. Listing and illustrating food all over the world which is transported by boats, aeroplanes, trains and trucks.

4. Recounting and depicting how one gets along with others by sharing, helping and being kind, and by respecting the property of others.

5. Constructing simple rules and standards for safe, friendly, and orderly living in the classroom and on the playground. Drawing pictures of 'How children help at home and at school'.

6. Informing young children about the work of humanitarian organizations such as the International Red Cross.

7. Discussing how rainwater carries soil away and finding out how United Nations Agencies teach people to improve farming methods so that their land will be more productive.

8. Doing research on how the world co-operates to control the spread of diseases and how the United Nations (and especially the World Health Organization) helps.

It is important that pupils learn to know how common the helping and caring activity is in human society. Some modern examples like Mother Teresa, Mahatma Candhi, are important to introduce. Pupils can make a special cooperative project concerning the life of e.g. Mother Teresa and Mahatma Gandhi.

Suggested activities:

1. All kinds of solidarity and charity activities. Students can collect money by doing projects at school such as obtaining Cristmas or New Year cards and selling them and collect money for their twin school.

2. Students arrange a secondhand market for the neighbourhood, or a festival program, a theater play etc.

3. Students have a workshop on helping others in the class. They discuss the topic:" Who needs help and what kind of help?" in the school. Questions like: "What help they themselves need, how they could help others?" are answered alone or together. After discussion the real help program is planned together. In my peace and international education project students discussed about the problems, they had seen in the school and together they came up with ideas how to solve the problem.

4. The favorite play: Secret Friend. At the beginning of the week students get the name of a classmate by lottery. During the whole week they pay special attention to this friend, help and support and do "nice things" for their secret friend. At the end of the week students have a chance to guess who their secret friend was and they get to know their secret partners.

5. Students help each other in the learning process. They study in pairs or groups instead of alone. A teacher supports the better student in helping their partner to learn. A role-play, in which some are teachers and some are students, and after a while they change roles.

6. Students write letters to the editor to the local newspaper to express - their concern for poor people, orphan children, loneliness of elderly people etc.

7. The class visits institutions for the handicapped to make friends there, and sends them cards, letters, and organizes parties.

8. The class arranges a camp-school for helping somebody, e.g. helping to renovate an old house of the poor, helping a farmer.

9. A special week called "WEEK FOR HELPING AND FRIENDSHIP" when - students make posters or arrange art exhibitions on this theme. They can produce plays; they can invite a representative from the Red Cross to tell about their solidarity and relief operations.

10. Play called Blindman's stick. Students walk in pairs and one closes his or her eyes and the other leads him or her through a certain road. The students can then change roles, so that all students have both kinds of experience.

11. A special week for HOW TO BE POLITE TO OTHERS, using posters, plays, etc.

12. Friendship road, where students work in pairs, helping each other go through a road where the others have planned special tasks.

13. Helper pairs during the break between lessons. The students may spend one week working as helpers to make the break safer and nicer. They can even arrange some cooperative games, or try to resolve conflicts that occur.

14. Classes have special friendship classes where there are handicapped or mentally retarded children. They write letters, act plays, arrange festivals together and one class for each other. It is good to arrange this friendship relationship so that upper classes have lower ones to pair with.

15. Cross-age and same-age tutoring in schools and neighborhoods, the assignment of chores and responsibilities (with meaningful and visible effects) at home and at school; community service activities; and care of plants and pets.

16. To create altruism means to give students the possibilities to do and think of ideas for helping and caring. The most important principle is that students can have real responsibilities. Learning by doing, learning by real experiences is an old principle, but in practice so many times forgotten. If we want to promote moral growth, we must give students the possibilities to behave as moral actors.

8. LEARNING FOR COOPERATION AND NON-VIOLENCE

Our militaristic culture emphasizes and idealizes competition and violence. War toys, weapons industries, violent mass media and cartoons indoctrinate us to the idea that violence means power, prestige, winning.

Peace education challenges the cultures of militarism to show that this idealization is dangerous. Violence seems to be an easy way to get power, but in fact it leads to new violence. Every war plants a seed for a new war. Power which has been gained by using violence creates the threath of loosing the power. Skolimowski (1987,39) says that nearly all present cultures are sick. The name of this sickness is atropy of values. Consumerism and militarism are the sick values of most societies.

The reality of war, which is unnatural to human nature, can not be created without cultural and educational manipulation. The typical features of militaristic culture are ethnocentrism, belief in authority, and overestimation of competition and violence. Peace education is of the lines of thought which try to break the value and power structures of militaristic culture in society (Wahlström 1990). The humanity has for long based conflict resolution on violent and militaristic solutions. The pollution of the earth is nowadays so great that humanity is in a hurry to get rid of wars. Wars do not only kill people, they kill nature. Nature is nowadays so ill that no one is actually winning any wars. After the war there is no free country, only totally polluted ground.

Militarism is based on patriarchalism and sexism. Men in most societies are taught very early to be masculine, to respect only other men who are masculine and compete with each other. Peace education aims to change the content of masculine identity. Fatherhood is an important component of masculinity. Cultures should appreciate fatherhood more than it has been done. The values of nurturing of life, caring and sharing exist in masculine and feminine cultures, it has only been neglected and underestimated in masculinity.

One of the tasks of peace education is to sharpen an awareness of conflict, encourage non-violent solutions and develop the necessary confidence and skills for their implementation. The use of violence to resolve conflicts still seems as widespread and as senseless and tragic as ever. But we have the capacity for care and concern and tenderness. Most of the nations and most people are peaceful, and never use violence. Violence is visible and harmful and war is a pathological behaviour of humankind.

We must get rid of false myths that support warfare, armaments and violence. The belief that war is an intrinsic part of human nature is a myth still affecting human minds (Adams & Bosch 1978; Wahlström 1987). This erroneous belief is perpetuating the opinion that there have always been wars, and therefore there will be wars. This wrong belief has been proven false, scientifically. The Seville Statement on Violence was drafted by an international committee of 20 scholars at the 6th International Colloquium on Brain and Aggression held at the University of Seville, in May 1986. The Statement's purpose is to dispel the widespread belief that human beings are inevitably disposed to war as a result of innate, biologically determined aggressive traits. UNESCO adopted the Seville Statement at its 25th General Conference Session in Paris, October 17-November 16, 1989. The Statement has been formally endorsed by scientific organizations and published in journals around the world. UNESCO is preparing a brochure to be used in teaching young people about the Statement (see Appendix 1). The Statement assumes that it is scientifically incorrect to say that war is caused by 'instinct' or any single motivation. How to prevent violent and warlike behaviour, decrease the number of killings, murders and wars is a major question to be answered by society and education.

In contrast to violence by some and passiveness by others, nonviolent action is the creative way to resolve conflicts. Violence or the threat of violence may force the opponent to change behaviour, but non-violence aims higher; it wants to change an enemy into a partner and to overcome one's own feelings of fear and hate. Nonviolence is the way of love, of reconciliation, of peace offering.

Nonviolence in a system of violence is often met with violence. Nonviolence often means taking risks, but only nonviolence has the potential for transforming the violence ethic.

Brock-Utne (1989) has suggested that non-violent strategies call for creativity and inventiveness for the application of the feministic idea that means and ends should be identical. It is an important task for peace education to develop ideas and images and visions for non-violent solutions to the world and national problems. Non-violence towards people and nature must become the sacred value of humankind, and peace education is helping in the process of achieving this value.

Violence is aimed at conflict resolution. There are interpersonal, intergroup, and international conflicts. In social interaction situations using a socio-psychological approach (Deutsch (1973, 79) there are several key notions (Deutsch 1973, 97):

1. Each participant in a social interaction responds to the other in terms - of his perception and cognitions of the other; these may or may not correspond to the other's actualities.
2. Each participant in a social interaction, being cognizant of the other's capacity for awareness, is influenced by his own expectations concerning the other's actions as well as by his perpections of the other's conduct. These expectations may or may not be accurate; the ability to take the role of the other and to predict the other's behaviour is not notable in either interpersonal or personal crises.
3. Social interaction is not only initiated by motives but also generates new motives and alters old ones. It is not only determined but also determining.
4. Social interaction takes place in a social environment in a family, a group, a community, a nation, a civilization- that has developed techniques, myths, symbols, categories, rules, and values that are relevant to human interaction. Hence, to understand the events that occur in social interactions, one must comprehend the interplay of these events with the broader social context in which they occur.
5. Even though each participant in a social interaction, whether an invidual or a group, is a complex unit composed of many interacting subsystems, it can act in a unified way toward some aspect of the environment."

In education for non-violence and cooperation we should take into account what Deutsch has written about social interaction.

Violence takes place in a very complex social interaction and it is a reflection of many elements, such as needs, desires, images, interpretations, traditions etc.

As humans we have learned that *Images are often much more powerful than facing the reality. Images and interpretations of the reality create our experiences about the world. If anyone wants to change a human mind, they must explore their images and interpretations and respect them.*

The world cannot be totally freed from violence, but it may be possible to abolish a socially organized form of violence war. War is a special case of violence. It is supported by money and some political power system. It is organized; it has been legitimized in society. In many countries nowadays the army is a "holy cow" and the security of the country is still believed to be dependent on supporting the national army. There are exceptions; in Costa Rica there is no national army, it was abolished by the law. Nowadays we know that no army can defend any country's borders against acid rain or nuclear holocaust or pollution. But the image that an army can defend us is so powerful and so well indoctrinated that it is still very hard to get rid of it.

All efforts to get rid of this dangerous and expensive image or belief are valuable. Peace and International Education aims to create new visions and images where the old-fashioned belief systems have changed to more realistic ones. Peace and International Education aims to create and teach new conflict resolution and mediation training.

According to Deutsch (1989, 8-9) there are common elements in most conflict resolution training e.g.

a) Know what type of conflict you are involved in: the pure win-lose conflict; the mixed- motive (both can win-both can lose). Different types require different strategies. Many conflicts are misperceived as win-lose conflicts.

b) Become aware of the consequences of violence and of the alternatives to violence.

c) Define the conflicting interests between yourself and the other as a mutual problem to be solved cooperatively. Define the conflict in the smallest terms possible, as a "here -now this" conflict rather than as a conflict between personalities or principles.

d) In communicating, listen attentively and speak so as to be understood. This requires one's active attempt to take the perspective of the other and to check continually one's success in doing so.

e) Be alert to the natural tendencies of both parties to bias, misperceptions, and stereotyped thinking that commonly occur during heated conflict.

f) Throughout conflict, try to remain a moral person (who is caring and just) and to consider the other as a member of your moral community (entitled to care and justice).

Conflict resolution training is one of the basic methods of peace education. There are many different kinds of conflict resolution programs. Deut; gives excellent examples of some basic elements of those.

In conflict resolution training it is important to teach students the effects of their acts on others. Induction involves discussing or pointing out to children the effects of their acts on others. Some theorists (e.g., Hoffman) believe that consistent use of induction increases children's awareness and understanding of the needs and feelings of others, their own empathy with those needs and feelings, and their desires to be helpful and considerate of others. In both induction and the communication of norms, values, and rules, the explanation and discussion of reasons is essential. These help children come to understand that constraints and prescriptions are not arbitrary and that their own acts not only affect themselves, but that each operates within an interdependent social system.

Cooperative games (New games) (see more Terry Orlick's book: " The Cooperative Sports and Games Book- Challenge without competition", 1979) have for many years been used as a tool for peace and international education especially in the kindergarten and primary school. The following examples of cooperation games show some of the possibilities. Those mentioned here have been selected for this report, because they do not need any special place, tools, or other resources. And many of them have already been evaluated to work well in practice.

Role plays are important tools for developing cooperation and non-violence. There are a lot of more ideas that can be used succesfully than those presented here. Role play can be attempted by using simple issues in the student's everyday life, and they can "brainstorm" the conflicts they know of: fights between siblings, bullying, violence against women, racism, pollution and war. They can then choose to act out some play about an issue chosen by them.

Brainstorming means an activity when all ideas that come forward are duly noted without any kind of criticism. This gives the students confidence in making suggestions without fear of rejection or ridicule. All sorts of conflicts can be discussed, and then acted out, in order to reach the most constructive solution.

Suggested activities:

1. Violent TV film series are good for analysis. The questions that students as a group can answer together are e.g.:
   Why were there so many violent acts?
   Who has written and produced the series and why has he/she used so much violence ?
   Does the violent TV film at any point show the sufferings of the person who has been treated violently? If not, why ?
   What kind of family, mother and especially father the crook might have had?
   Could the hero have used non-violent methods against the crook? How?
   What is the profit from violence? Who gets the profit and what is it really like? What is the model of violence doing to young people's (students' or pupils) minds? Do people really like violent culture, films etc, as we usually think. E.g. in Finland, the most popular videos are comic, not violent ones. Who create violent TV films ? Why do people watch them?
   Could we as students act against them?.

2. Students can organize a non-violence week, where violence is totally forbidden and the students start it by presenting a new non-violent schedule for the year.

3. The victim's view; a special investigation into the life of a victim, and a new cartoon made by students, where the victim becomes a non-violent, powerful hero.

4. A day or a week without watching TV. Students tell about their experiences of how this has changed their week.

5. Play the role of mother and father, but reverse the roles so that the father is motherly, caring for the kids and the home.

6. Students can learn that the accepted violence as a part of masculine identity image could be criticized.

7. Let your students think over the following psychological findings and let them give their own opinions about these ideas:
An aggressive person needs many times more love than any other person, because his or her anger is a result of lack of love.
Violent behaviour is often transformed form of depression.

The following examples of activities were used in the Peace and International Education school project. Those mentioned below were evaluated by teachers as being suitable for practice and for reaching the aims of peace and international education (Wahlström 1990).

8. Students bring violent cartoons from home, and at school they rewrite new kinds of nonviolent words on the pictures. They invent a new story, in which the pictures are the same but the text was different. The idea is to let pupils create a story based on cooperation, where the problems are solved by non-violent strategies.

9. A pair of pupils got a permission from the teacher to go and help the special teacher in the handicapped children's class by tutoring one handicapped child for 20 minutes after the break. That was a time when help was mostly needed. Every week the pair of pupils changed, and every pupil got to know what it is like to be with mentally handicapped children.

10. The teacher asked students (9 years old) to resolve mathematical problems in pairs. Children solved the problems (one per each pair) together, and then the teacher asked them to teach the class those problems. Each pair of students took the role of the teacher and told others how to solve the problem. The young children were excellent teachers and that was a good example of role-taking and a cooperative learning process.

11. A policeman came to the school to tell pupils about legislation and concrete examples of what happens if somebody is violent. Students asked many questions.

12. Pupils themselves invented the following cooperative game, suitable for teaching numbers as well. They sit in a the circle and one stands outside the circle. She or he leads the game. She or he says for example: those who wear something green move 8 chairs to the right and sit in the lap of the pupil who is sitting there. After a while another "leader"

is selected and she or he continues inventing similar orders. This game is a good one for adult meetings as well, if it is culturally acceptable.

13. Musical Laps: the group moves around in a circle with each person clasping the waist of the one in the front; when the music stops each one sits on the lap of the person behind him and success is when the group remains intact with the weight equally distributed so that no one is crushed or has to topple over to the ground.

14. Cooperative Musical Hugs: when the music stops, hug a partner; then - in threes, fours, and so on.

15. Big Snakes. Pupils are lying on their stomachs, one holding the ankles of the one in front: they climb over "mountains" and " streams."

16. Frozen Bean Bag: Everybody walks around with bean bag on their head. If the bean bag falls down he/she stays and waits until another retrieves a fallen bean bag back again while still balancing her own bag on her head.

17. Human Machine: where students make a train or some other machine (even imagined one) with their bodies

18. Whispering: a sentence is whispered around a circle and at the end students check how the message has been changed.

19. Telegraph, where a message is sent round non-verbally with hugs, squeezes and pauses. This will help students to practice both speaking and listening. They learn to pay close attention and to realize how misunderstanding can arise through inattention and lack of awareness.

20. Blind Neighbours: Everone has a chair. Chairs are put in a circle. Half of the group sits down with eyes closed, leaving every second chair empty. Then the other half sits down and each of them starts singing a song of their choice. Each person with eyes closed has to guess who is sitting on their right.

21. Half of the students take the role of First World countries and half of the students take the role of Third World countries.
They play the joint trade game. Students think what they can get from the First World and what they can sell to the First World. During peacetime both get everything; oil, coffee, fruits and minerals, etc. from the Third World and medicine, machines, etc. from the First World to the Third World. While it is war, they do not trade (export, import) these to each other. It can be played so that students turn backs on each other during the war.

9. EDUCATION FOR ENVIRONMENTAL RESPONSIBILITY

9.1. Sensitivity to nature and environmental education

A century and a quarter ago, chief Sealth of the Suquamish Indians rebuked white emissaries who offered to buy his tribe's land with the words: " The Earth does not belong to man; man belongs to the Earth". (UNESCO 1988)

The task of human beings is to understand that they are only one of the organisms in the complex and vulnerable ecosystem. They have to become aware of this basic bond between them and nature.

"Human beings generally have the mentality that superiority and domination are necessary for existence. We subdue the earth and wreak havoc on the environment to get what we need to sustain our lifestyle. The humankind uses violence against the environment to get what it wants" (Heinrichs and Machintosh 1990, 16) The domination attitude over nature attitude is one of those which have to be changed via environmental education.

Military activity itseself has costly negative effects on the environment. Mining for uranium and producing plutonium are major sources of the deadliest toxic pollutant humanity has learned to dump into our environment. The radioactive wastes from the creation of nuclear power and weapons are life threatening for thousands of years (Heinrichs & Machintosh, 1990, 16). Every single war has a severe pollution effect on environment. Military decisionmakers should count the damage of the nature as one part of the costs. Heinrichs and Machintosh (1990, 20) write: " As long as we continue to have a world mired in military confrontation, we cannot have the will to cooperate on environmental matters; as long as we continue to spend billions on suicidal arms race, we do not have the funds to put that cooperation into practice. Our environmental problems can only be solved through global disarmament, demilitarization, and international cooperation."

Education of, about and for the environment will definitely help inviduals to realize their responsibility, not only towards their fellow beings, but also towards the total environment.

Environmentally responsible behaviour means that a person has 1) an awarness and sensitivity to the total environment and its allied problems and or issues, 2) a basic understanding of the environment and its allied problems and

or issues, 3) feelings of concern for the environment and motivation for actively participating in environmental improvement and protection, 4) skills for identifying and solving environmental problems and /or issues and, 5) active involvement at all levels in working toward resolution of environmental problems and /or issues (Hungerford and Volk 1990, 8).

Skolimowski (1984) has outlined new imperatives and moral principles concerning the relationship between nature and human beings:
-behave so that you care for evolution and its richness
-behave so that you care for and empower life
-behave so that you care for and empower those skills which are the highest found in the cosmos: consciusness, creativity and empathy.

Skolimowski has an anthroposophic perspective, but in a manner which is useful in environmental responsibility. According to Taylor (1986) our world view should include the understanding that the human being is not above other organisms and all the organisms need each other and are interdependent on each other.

Environmental Education should consider the environment in its totality-natural and built, technological and social- and it should be a continous lifelong process. Environmental Education should examine major environmental issues from local, national, regional and international points of view so that students receive insights into environmental conditions in other geographical areas. Environmental Education aims to promote the value and necessity of local, national and international co-operation in the prevention and solution of environmental problems and emphasize the complexity of environmental problems and thus need to develop critical thinking and problem-solving skills.

Hungerford & Volk (ibid.) have created an interesting model for environmental education. One basic premise is to evoke *sensitivity to nature*. Sensitivity to nature means that human beings understand and experience emotionally that they are dependent on nature. Every single technical achievement and every single tool has been made from natural resources (even computers, missiles). Sensivitity to nature means that one feels emotionally the importance of nature and can listen to the voices of nature. To be sensitive to nature means to feel that one is a part of nature and to experience the beauty of nature. It means also knowledge about ecology. This knowledge can be acquired little by little as associated with real experiences within nature. A personal commitment

is the second important base in environmental education. A personal commitment to care for nature and to take nature into account means that the real choices in life are based on this personal commitment. It means personal investment. The last step in Hungerford & Volk's model is empowerment.

Empowerment means that a person has a knowledge and a skill in using environmental action sti.ategies and an intention to act. Hungerford and Volk (1990, 10) analyze the role of knowledge. Before an individual can intentionally act on a particular environmental problem, that individual must be cognizant of the existence of the (issue). Thus, knowledge of the (issue) appears to be a prerequisite to action. Individual must also possess knowledge of those courses of action which are available and which will be most effective in a given situation. Another critical component ... is skill in appropriately applying this knowledge (i.e., knowledge of action strategies) to a given issue). In addition, individual must possess a desire to act. One's desire to act appears to be affected by a host of personality factors... locus of control, attitudes (toward the environment and toward taking action), and personal responsibility (toward the environment). Situational factors, such as economic constraints, social pressures and opportunities·to choose different actions may ... serve to either counteract or to strengthen the variables in the model.

It is important to let students to take local iniatives. They can find together one local environmental problem and plan various strategies to solve the problem. Supporting practical local activity is an example of from theory to practice learning. While finding a local environmental problem students have to know a lot of theoretical things, facts etc. And how to solve it, is another task of learning.

9.2. Environmental education as part of formal education

The main principle according to Keiny and Shachak (1987,44) is to increase students' knowledge and awareness of living systems via direct interaction between them and the environment. This means that students should be exposed to actual existing environmental problems as·an integral part of their personal education. The translation of the ideas of Environmental Education into practice and their integration within the formal educational system is problematic and it is a new challenge for all educators.

Among the models suggested by curriculum professionals for Environmental Education, four common components can be identified (Keyny and Shachak 1987, 450):

1. *Interdisciplinary approach*
2. *Integrative learning processes*
3. *Problem-solving approach*
4. *Use of the environment as a learning resource.*

The interdisciplinary environmental questions focusing on the man-environment relationship create a problem-solving approach in the learning process. Innumerable questions of this kind can be raised: How could ancient farmers grow grapes on an 80 mm annual rainfall? What are the effects of the agricultural system on the natural ecosystem? Environmental education leads to understanding the human being-environmental relationship and a human being's responsiblity.

In socio-political decisions *the environmental cost should be taken into account.* Environmental Education aims to advance human understanding so that in the decision making situtions the environmental aspect is always taken into account.

Environmental education aims to promote a belief that one can affect society. Education for environmental responsibility means that one believes in a responsibility to act and work for global survival in society.

Hungerford and Volk (ibid.) suggest components changing learner behaviour through environmental education. They are:

1. Teach environmentally significant ecological concepts and environmental interrelationships that exist within and between these concepts. Those concepts according to van Matre (1990) are e.g. dependence on solar energy, energy flow, interrelation of organisms and cycling.

2. Provide carefully designed and in-depth opportunities for learners to achieve some level of environmental sensivity that will promote a desire to behave in appropriate ways. Environmental sensitivity can grow out of outdoor experiences and esthetic enjoyments in nature.

3. Provide a curriculum that will result in an in-depth knowledge of issues. Interdiscplinary project could be one solution.

4. Provide a curriculum that will teach learners the skills of issues analysis and investigation as well as provide the time needed for application of these skills.

5. Provide a curriculum that will teach learners the citizenship skills needed for issues remediation as well as the time needed for the application of these skills.
6. Provide an instructional setting that increases learners expectancy of reinforcement for acting in responsible ways, i.e., attempt to develop an internal locus of control in learners.

It is possible to create a many-sided reward system concernign responsible and non-violent behaviour. There could be special themes, weeks, competitions etc for environmentally responsible behaviour or for resisting violence in society. Rewarding and reinforcement is the most powerful tool to shape one's behaviour, as we know from the results within educational psychological experiments. In the light of the follow-up study, its seems obvious, that learners need to be reinforced for positive environmental behaviour over time. By rewarding learner after responsible behaviour you reduce their feelings of insignificance (Hungerford & Volk 1990).

Dialogue and a decision-making approach can form the foundations of active and environmentally responsible citizenship. Clarification of personal values and opinions in an open dialogue helps students to channel their emotions in a conctructive way. Rewarding itself is not enough. Human being needs a personal commitment and understanding of the issues. Experiential learning, values clarification methods and possibilities for decision-making are components for real responsible behaviour. In the decision-making approach teacher requests students to ask questions only to further their own understanding of the speakers' premises.

Environmental education deals with education for values and attitudes. Some methods created for moral education are suitable for environmental education, e.g. moral discussions, cooperative learning, role-taking etc, but the contents within these methods uses the problems from the human being-environment system relationship. *Perception, experience and knowledge combined* is the basic principle in environmental education. If students have possibilities to perceive and investigate a phenomena, the knowledge and understanding is tied up with this process.

Environmental education uses a lot of practices developed for outdoor education and real, emotionally influenced experiences in nature (Caduto 1983 a,b).

Students can collect personal experiences such as listening to the song of birds, smelling the aroma of flowers, and touching stones. The main purpose is for students to get a personal, emotional affection for nature. Real research

projects such as assessing the changes of pollution of water, give experiences and knowledge about the results of human impacts on nature. Responsible attitudes and values grow up from real experiences and understanding. Investigating pollution, and changes of nature, are important in environmental education. In recent years there has been a movement within the field of environmental education toward a stronger emphasis on developing learners' emotional, intuitive, and aesthetic appreciation for the environment. Van Matre's (1979) ideas in his book 'Sunship Earth' are among the best examples of that orientation.

Suggested activities:

1. A study program of the local surroundings, the soil, climate, water, animals etc, and changes in the surrounding during the schoolyear.

2. Let the students make a plan for caring better for their immediate surroundings; the school yard, a garden etc.

3. If practically possible, they should plant a little garden which they look after.

4. Food program: Choose one meal and trace its ingredients back to their origins in nature.

5. Water program. Clean, fresh water is becoming more scarce. Students who live in an arid area will be fully aware of this condition. Have the students calculate how much water they use in a day by making a chart that indicates how much is used for drinking, for washing etc. Students can make a plan of how to save water and consume less of it in daily life.

6. Letters to the editor written by students to the local paper against pollution and about environmental problems. This idea is possible to integrate at all levels of education and integrate it into mother tongue teaching.

   The following activities were implemented and evaluated in the Peace and International Education Project :

7. Students planted a tree of life in cooperation with all the staff of the school. The tree planted near the school building was to symbolize life and friendship. Myths and fairy tales of the tree of life were told, and students decorated the wall of the classroom with selfmade trees of life.

8. Students of two classes together made a huge tree of life on the walls of the school. On it, all essential aspects of life were drawn into the leaves of the tree.

9. Students and the staff of the school planted bulbs of crocus in a group, and a big party was organized.

10. Students made a program about environmental care and presented it to other classes. The program was about stories told about two families who went on a picnic; one of them spoiled nature, and the other showed care for nature.

11. Students had a workshop concerning the following three questions:
    a) What can I do for the environment?
    b) What can my school do for the environment ?
    c) What can and should society do for the environment?

12. Students discussed all the suggestions and together chose the best ones and presented them at a poster exhibition.

13. Students made special posters against pollution on the walls.

14. Students went for a walk near the school to see birds and nature. Students studied birds and their life habits with the teacher.

15. Students made observations regarding the pollution of the surroundings and recorded the cases.

16. Students tidied up the surroundings of the school and learned about all the methods of recycling of the paper, glass and other recyclable substances.

17. Students got their "own place" near the school and observed that place once a month and wrote a diary about the changes. The place can be a certain tree, stone, corner, etc.

18. Pupils decorated their classroom by bringing little things from their homes to put on the shelves.

19. Each student planted a flower in a pot and cared for the flower and brought it into her or his home.

20. Students explored the news about pollution and environmental issues in the daily newspaper. They set up an exhibition based on news.

21. Students organized a workshop concerning water and explored how limited a resource clean water can be, and what kind of problems human beings have made for water cleanliness.

22. Students go outside and select a place to sit and relax. They look around and after a while they write a short essay on what they have seen. They can write a poem or song or draw their own impressions. Then they are asked to select one thing they have seen around, e.g. a stone, flower, an insect, an empty tin and afterwards tell why they selected that object and how they experience the object they have selected.

23. Students are asked to select an animal who is like them and tell each other what the animal is like.

10. PEACE AND INTERNATIONAL EDUCATION FOR CREATING A BETTER FUTURE

One of the main objectives of education is to resolve the confrontation between two great concepts, the concept of our inalienable right to invidual expression and the concept of our common responsibility. These two seem to be contrary in nature, but could be joined together.

The future of life on the Earth is dependent upon the willingness of those people who manage 'regional ecosystems' to build and maintain national and international co-operation. In other words, where several nations or cultural groups presently co-exist in a region, they will not be fulfilling their common responsibility to the future of the human race, unless they start to cooperate seriously.

Educating people to be critical, active and trusting of their own ability to plan a better future is an important task of peace and international education. In creating a better future, students need models as well as the opportunity to take on real responsibilities themselves.

For creating a better future, we need to develop the capacity to reconcile not only the political differences in the world but also many of the other elements now in conflictual, destructive relationship to each other - those fragmented relationships that characterize personal as well as international systems and processes. Returning to health and wholeness requires strength and a form of courage that we have not yet acknowledged as the essence of heroism. But recovery also refers to reclamation, uncovering or rediscovering, regaining that what has been lost. The regaining of much of what has been repressed and forgotten of human capacities may be essential to the transcending of the pain and shock of a paradigm shift. It may indeed be the most hopeful aspect of our search to develop the capacity to recover. As indicated earlier, there is much to be recovered from our past, much that we know about how to build positive human relations and create a better future.

The following are important contents to be discussed as creating the image of a better future: conflict, peace, war, environment, justice, power, gender, race and armament.

Power and how societies accept so called pathological power (see Keppe 1988) is one of the most important issues to be faced and reflected on.

Militarism underlines the probability of war, "vis pacem para bellum", whereas peace and international education *emphasizes the vision of the world without war.* The false belief that arms increase security is questioned. Peace education guides people to contemplate a better world. As Engeström et al. (1990) has stated: *"People face situations where they must engage in formulating what shall be a desirable culture".* Polack (1972) suggests that societies move toward what they imagine. According to Boulding (1988) we need to begin picturing the new order in our minds, fantasizing about it, playing with possibilities. An exercise in first stepping into a desired future in imagination, then consciously elaborating the structures needed to maintain it, and finally imagining the future history that would get us there, is a very liberating experience for people who feel trapped in an unyelding present.

Peace education creates a new kind of paradigm to perceive the world. In this perception humankind is experienced as a unity. People are seen as children of the same Mother Nature and one and the same universal life manifests itself in each individual human life. Human meaning has a cosmic meaning. While perceiving the world in a new way, a human being understands how important and enriching the diversity of cultures is, and how all the creatures in the world have a value 'an sich'.

There is no place in this new image of the world for the patriarchal hierarchy and power structures. The aim of militaristic rule is to merge minority cultures into the dominant culture. In the culture of peace, the preserving of each minority culture is important. Peace and international education provides an optimistic and realistic vision of the future, where solidar'ty exists among people and toward nature.

The purpose of peace education is to develop an ability in people to act for their peace conviction. In the present world, direct and continuous action is required for the preservation of life.

Peace education aims to create a new male culture, in which fatherhood is equal with motherhood. The possibility to take paternity leave after the birth of one's child exemplifies the emphasizing of the importance of fatherhood. Paternity leave is possible e.g. in Sweden and Finland. We can talk about a new male culture, where such qualities as fatherliness, care, affection and sensitivity are included in normal and healthy masculinity. The violent, dominating and possessive macho male image propagated by militaristic culture appears ridiculous and dangerous in the new male culture. In the culture which emphasizes fatherhood,

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affection and non-violence, courage is an ability to find peaceful means to resolve conflicts. In the new male culture it is possible to take off the strait-jacket of competition without threatening the healthy and self-confident masculinity.

Modern culture is overloaded with games and plays which have "loosers and winners". This kind of tradition teaches us to see enemies and ourselves as loosers or winners. Competition within school is emphasized by a battery of professional educators, counselling and testing officials who determine normal distributions and establish grading curves that condemn many students to mediocrity. Brock-Utne (1989, 96) calls it structural violence built into the school system. To be able to imagine a vision for a better future, it is necessary to analyse and understand the culture where we are now. We are imprisoned by our culture. But we cannot even shake the bars, because we do not see them (Wahlström 1990b).

The militaristic culture in which we are imprisoned emphasizes and idealizes violence. One of the tasks of peace education is to prove this idealization dangerous. Above all, non-violence includes the ability to listen and to understand the view of other(s). We can find peaceful means to solve the problems caused by war and structural violence only by trying to understand and consider the view of minorities and the oppressed. And for creating the images and realities for the better future, we have to learn to listen to two currently voiceless groups, women and children. We have to learn to listen to the voice of Nature, MOTHER EARTH.

Suggested activities:

Boulding (1988) has created a workshop to promote imagination for a better future and peace. The aim of the workshop is to strengthen one's concept of a weapon-free world, based upon Ziegler's (1987) method. Boulding's method has five steps:

> *Step 1: Goal statement: checking out your own hopes for the world.*
> Ask your students to write or tell a goal statement about what they would like to see achieved in the social order three decades from now. These are not goals for your personal life but for society as a whole. The goal statement should - by the workshop's terms of reference - be compatible with a weapons-free world.

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Step 2: Exercising the imagination: memories
Students may be permitted to relax and tell some important memories in order to experience the type of imagination that will take place once they 'move into' the future.

Step 3: 'Moving into' the future
Students should imagine, observe, and record things during their 20-30 year stay in the future.

Step 4: Clarification
The imagery experienced becomes clarified through a process of explaining it to other people and having it subjected to general questioning.

Step 5: `Consequence mapping` and world construction`.
Students should look for answers to the following questions and many others about their 'future histories': What kind of world is it? How is it run? What institutions (political, commercial, religious etc) function there and how do they function? And in particular: How is conflict managed?

Methodology:

1. Students should be told to close their eyes, while sitting down or lying on a coach. Suitable 'background music may be played at the beginning of this exercise e.g.some of Haydn, Mozart, Vivaldi, or Beethoven. The teacher says "Try to remember an emotionally pleasant experience from your childhood". After 5-7 minutes the teacher asks the students to open their eyes and to tell their memories to each other.

2. The teacher says "Now relax again, close your eyes and try to imagine the future in 30 years time when there will be an age of "non-violent world". The students have to imagine the world without weapons and arms and other mechanisms of institutional violence.

   They again relax for 5-7 minutes, listening to music. The teacher then says "Open your eyes and tell us what the world is like". They have to concentrate and say how the world is functioning at that time, in that situation. They can ask each other questions while talking about their image of the world.

3. Action planning in the present. The students are asked to tell how this future could be gained and what they personally can do towards it. The pictured future and the remembered events now become the basis for short-term

action planning in the present and long-term strategy planning about the future. The difference between the planning we normally do and the same activities in this context is that we now have, in a certain sense, experienced the future reality of what is being planned for. This gives the wished- for future a quality of "thereness", of authenticity in relation to human possibility, that adds new dimensions to practical reality testing in the present.

Future Workshop I: Brainstorming

Students walk around in the class. There they have many pencils and papers fixed on the wall or a large blackboard and they get the following task:
Answer the question: What kind of activities do you suggest for creating a better world: a) for yourself and b) for the society. Walking is relaxing and stimulating. During half an hour's time everyone writes their ideas on the papers or on the blackboard.

After that everyone has a chance for half an hour to consider the ideas and mark with a cross (for example 5 times to the first five best ones) those ideas they have found good. After this the coordinator collects those ideas which got the most crosses, dividing them into a) what a student can do and b) what a society can do for a better future.

Students and the coordinator (educator, teacher) discuss the possibilities of realizing the best ideas and what plans the group can have for the future. The coordinator might select only one of true questions mentioned above, depending on the time restrictions. Suitable relaxing music can stimulate the imagination here as well.

Future Workshop II

The same as above, but the questions can be:
   a) What must everyone do for caring for the environment and preventing pollution?
   b) What must society do for caring for the environment and preventing pollution in own country and in their international relations.

Future Workshop III

The same method as above but the questions can be:

        a) what can society do for orphans and abandoned children?

There are a lot different other possibilities. I have used the following questions teaching teacher students: Imagine Finland after 20 years as you hope it to be and after that answer two questions: What can I do for supporting society to be as I want it to be and which kind of knowledge and education do I need to be able to do that?   Finnish students imagine Finland which has a clean environment and tolerance in the society. Students want to teach children to learn to respect nature and other cultures. Students wanted more education and practical training courses in environmental education.

11. PEACE AND INTERNATIONAL EDUCATION PROJECT IN JYVÄSKYLÄ

11.1. The implementation process: how to do it?

In Finland the promotion of peace has been included in all school legislation as one of the goals of education. According to the Comprehensive School Act (1983/476) the school should aim at educating students so that they become harmonious, healthy, responsible, independent, creative, co-operative and peace-oriented people and members of society. The Act states:

> Instruction and other activities in the comprehensive school should be organized in such a way that they will provide the pupils with readinesses necessary for the many-sided development of their personalities, for society and working-life, for choosing an occupation and further education, for the protection of the living environment and nature, for the promotion of national culture and national values as well as international cooperation and peace and to promote equality between the sexes.

Also in other laws related to the field of education peace education is defined as part of the content of the educational system of Finnish society. In accordance with the Comprehensive School Act, the following laws contain an obligation to provide peace education: Children's Day-Care Act 1973/36, Child Welfare Act 1983/476, Act on the Development of Secondary Education 1978/474, Upper Secondary School Act 1983/477 and Act on Vocational Institutions 1987/487.

In spite of the obligations given by the legislation, only a few short-term experiments have been carried out in Finland on peace and international education in schools, for example in the Teacher Training Department of the University of Jyväskylä (Laine, Malinen and Sihvola 1986) and one study on the peace education of children under school age (Wahlström 1988).

The Peace and International education project was designed to be carried out as a two school-year practical experimentation program for the development of activities in the primary school (7-13 year-old students).

The main objective of the research is, together with the teachers at the experimentation-school, to plan, develop and execute the curriculum for peace and international education. The research will focus on the study of the changes that occur in teachers' educational consciousness and in practice and on the development of the school community and its organization.

The experimentation-school was Keltinmäki primary school in Jyväskylä. Keltinmäki is an ordinary suburb area, with mainly middle and working class inhabitants. In the school there were 550 pupils, 32 teachers and two special teachers, a part-time school guidance councelor and a part-time school nurse.

The school has 23 basic teaching groups and two special classes for the physically and mentally handicapped pupils. The headmaster, the assistant head-master and 6 teachers were chosen for the cooperation committee led by the researcher. The school was approved to be one of UNESCO`s ASPRO School.

The Peace and International Education Project was carried out during 1987-1990. The cooperation committee planned the experimental program for 1988-1990. The experimental program was carried out in the entire school but there were three special experiental classes. In the beginning of the implementation process, they were grades 1, 3 and 5. The aims of peace and international education were integrated into different subjects.

Cooperation between home and school was developed in many ways taking into account the aims of peace and international education. The special parent school was arranged. The parents gathered three times and the topic of the school was Peace and International Education. In the first two meetings the aims and methods of peace education were discussed and the third one concerned peace education in school practice and the solidarity activities and the friendship school relationship.

The special coordinator group of parents were selected to promote, together with teachers and pupils, the friendship school relation. The coordinator group had several meetings. It arranged a second-hand market to collect money for the friendship school.

The school acquired a friendship school from Tanzania and in that way the school got involved in the process of getting to know about African and Tanzanian culture. The friendship school was a school for South-African refugees, called SOMACFO. The problems of racism were discussed in many ways, partly because of the friendship school relation and partly because the South-African situation was very often mentioned in the media. The main anti-apartheid leader, Nelson Mandela, was released at that time. Moreover, some teachers of the school have earlier visited Tanzania, Kenya and Sambia and they had personal experiences and views on racism and African culture.

Pupils sent personal letters to their new friends in SCMAFCO. They wrote little books about Finland and sent them to the friendship school. Pupils made

voice letters by using a tape recorder to be sent to their friends. The school had many visitors from the friendship school: a previous headmaster and students, who were then studying at the University of Jyväskylä as scholarship students. The school with the help of parents' cooperation group and Peace Education Institute supported one teacher and one pupil from the friendship school to come to visit and tell about their life.

The school arranged an African culture week, in which various aspects of African culture were presented. Pupils arranged an exhibition from the news written about Africa and they watched films and videos about Africa. They decorated the walls of the school with the paintings and pictures of African life and villages. The special exhibition with fruits from Africa and some objects (e.g. the painted egg of ostrich and drums) were presented. A previous student from the friendship school visited classes and taught the pupils African dances (e.g."snakedance") and African music and songs.

11.2. The main results of the peace and international education project

The concepts and attitudes towards Africa and African people were studied by using association technique and analysing pupils's essays. The fifth and sixth grade pupils (80, 40 boys and 40 girls) wrote an essay " I visited an African village". In the association technique pupils were asked to write following the general instructions:

1. that there would be no right or wrong answers

2. that they were to write down quickly what they could think of in two minutes for each word/sentence

3. that they should not ask questions, make comments loudly or look to their neighbour during the test. The stimulus sentences were : 1. What do you know about Africa ? and 2. African people are.... Methodology was a revised version of the one used exploring enemy images (Bjersdtedt 1989, Keldorff 1990, Wahlström 1990).

The results showed that there was a positive attitude towards African people. One clear stereotype was written in more than 60% of the answers and it was: The African people are poor and black. Only four strongly negative images were given, those written by boys.

It was interesting to find out that an anti-racist understanding in the pupils' answers and essays about African people. Some pupils wrote examples of what racism means in daily life. They wrote that racism means that blacks and whites cannot go to the same places or live in the same area and that their education is different. In their essays, some pupils wrote moral comments on racism. It seemed that pupils learned to understand what racism means in the real life (Wahlström 1991).

These results showed that there can be a benefit in peace and international education. Friendship relationships have been shown to be especially important in reducing prejudices (Wrighstman 1972).

Many cooperation games, plays and other activities were implemented during the project. One experimental class (fourth grade, 24 pupils) were interviewed asking their opinions concerning the cooperation activities and games and plays. The possibility to plan together one week`s program was evaluated by pupils after the experience asking them to write their opinions. They mentioned e.g. the following " It was really good to learn to plan together what to do and when to read our lessons." Pupils could plan to make e.g. all the maths of the week during one day, if they wanted to do it like that. They did the planning together with pairs. They wrote: " It was good to get to learn one subject for many hours and not change it after one hour. ", "It was nice to work with a pair". "It was work according to our own decisions, not to teachers." "I like that". " I hope that it will become another time to do like that". There were no negative comments in pupils` writings.

Concerning the pupils attitudes for cooperation games and plays, the following results were obtained after interviewing 4th grade class. Pupils had previously played many cooperation games during the project. One of those plays was to plan together in groups own cooperation game. The pupils were interviewed what kind of play they will prefer to plan: cooperation or competition game? All pupils (10 girls and 14 boys) except two boys prefered to plan a cooperation game. More than half (58%) prefered altogether cooperation games, only 17% prefered competition games, 25 % couldn`t mention their exact opinion. The competition games were often valued very negative. Pupils commented: "The competi..ion is creating conflicts." "It is better not to compete, then you do not need to feel the pain of the looser".

Very popular cooperation game was Secret Friend (page 40, suggested activities number 4). Both boys and girls wanted to play that every week. That

happened even in the sixth grade. The teachers said that the popularity of this game astonished them, they exepted that boys in the sixth grade wouldn't like to play it any more.

The other results, the increase of pupils' self-esteem, moral development, critical thinking and environmental attitudes would be interesting to investigate. Unfortunately it has not yet been possible to develop a in-depth study and research programme. The students' evaluations and little essays after different activities show generally that pupils were deeply motivated, they started to express that they are the actors of their own life.

The basic problems of implementation were evaluated later by an interview of the headmaster. According to him the following aspects are important in the implementation process. It is important that *all the staff and parents are informed*. The project had so many new activities that in the beginning a parents' meeting as well as a meeting of the school staff was held. In that meeting it was possible to inform and discuss about the ideas of forthcoming activities. Informing the parents made them appreciate beforehand what was going to happen and they understood that different kinds of activities are integrated into learning all school subjects. The teachers had several meetings and training courses during the project. They could affect what was planned, and that supported the positive attitude for new ideas.

According to the interview of the headmaster, it is important to appreciate teachers' *values and attitudes. It is difficult to create a new model of teaching if the teachers are emotionally against new ideas. Different methods to develop a positive attitude towards new ideas are important.* It is helpful, if it is possible to get a special group of teachers to plan and develop and evaluate the actitivies. In a large school that seems to be an important strategy. This coordinating commitee had a meeting once a week or in two weeks and they informed other teachers about their ideas during the special cooperation hours that all the teachers attended. This coordinating committee was specially trained during the project. They visited a special Freinet school to get a model of Freinet pedagogy. The coordinating group visited a school which runs a special environmental education project. The headmaster of that school, was invited to come to tell classes what pupils have done in his school. The headmaster mentioned that these visits were very important to the teachers. The coordinating committee attended the special seminar devoted to peace and international education organized by the teacher.

According to the headmaster, visits, seminars, visitors and meetings and using the help of coordinating committee were important to make the project successful. The coordinating committee is very effective, if it could be divided into 2-3 persons' subgroups which can create new ideas together and then present them to the coordinating committee. Working in an 8 persons' group is not meaningful all the time. The coordinating committee invented the themes, which could be creatively included into the school curriculum (appendix 2). Moreover, the evaluation sheet was created and used by the teachers (appendix 3). Teachers used this evaluation sheet to document and evaluate, if the idea is suitable or not for school practice, and if the activity idea includes the aims and methods of peace and international education. The researcher collected evaluated sheets, and according to the remarks, 80 different activities were selected of more than 100 ideas. Most of those are written in this report unders the subtitles suggested acitivities.

The headmaster told that the teachers learned to be much more sensitive to pupils' ideas, they had learned to accept differences and the school was more peaceful than before. The class arrangements has changed, pupils were no longer sitting row by row, they were working as teams, circles etc. On the walls of the school there was information about friendship activities, UNESCO and Childrens Rights etc. The lecture hours have been made more flexible. The interior of the classes has changed. In the classes pupils and teachers have brought old chairs, tables, flowers, etc, to make the class more "like our place". Pupils take care with their pairs of the flowers and furniture and books they have brought from home into their class library. According to the interview of the headmaster, *the project has given a long-lasting impact on the school's daily life.*

12. FUTURE IS OURS, NOW!

We are living the time of global village
Our eyes have opened to see illness of Nature
caused by us
How can we who made an illness
become doctors?

Human activity has caused the current global environmental crisis. Education has not prepared people to handle systems of such size and complexity. We face the fact that trying to change learner behaviour towards peace and environmental responsibility, we need educational reform. The time is ripe for a radical reform of educational in view of the environmental and peace imperative.

Changing learner behaviour towards peace and environmental responsibility means a deep understanding of human motives, desires and cultural impacts. We can change our cultural tendencies, manners and habits by becoming conscious of those which pollute the world and human mind, and those which are leading us towards global survival.

Changing learner behaviour towards peace and environmental responsibility means a reform in educational practices. it means changing the adult education and especially teacher training traditions. To get to know the implications and practices of value clarification, cooperative and experiential learning methods, and integrating to these the basic contents of environmental and peace issues, is a reforming task for higher education and teacher training.

People often think that there is no use for Peace and Environmental Education. What is the real profit of peace education or concern for these issues at every level of education? We might think that if one violent act or one war is prevented because of this kind of educational effort, it has been worth all the work.

In Jyväskylä at the lower level of the practice school, an international education programme was conducted by the teacher training students. An Indian week was carried out at the school and results showed that pupils created positive attitudes towards India. (Liikanen & Vallström 1988).

There are some studies which show that peace and international education programmes can have an important impact on pupils' thinking, values and attitudes.

Mitsakos (1976) has obtained the same kind of results in his study in the Longview Foundation for Education in World Affairs and International Understanding. His report presents the conclusions drawn from the examination of the effect of the Family of Man Evaluation Study (FAMES) project on third grade children's views of foreign peoples. Seven conclusions were drawn in the light of a review of literature and the study's rationale: 1) a carefully designed primary grade social studies program with a strong global education dimension can have a significant impact on children's attitudes toward foreign people; 2) the program can have a significant effect on children's understanding of foreign people, 3) well-defined objectives, specific materials, and sequencing achieve better results than an unstructured or poorly defined program; 4) global education does not need to be postponed until ages 9-10.

Even if the research findings are not too many, the general result of different kind of peace and international education implementations support Aboud's (1988) idea, that there is profit in Peace and International Education. Bjestedt and Gustafsson (1977) reports how peace education and conflict resolution affected the pupils attitudes and conflict resolution abilities.

There is no one who can provide a medicine to cure humanity from the illness of militarism, violence and pollution, but it is worth trying to cure the patient, even if sometimes the patient cannot notice the seriousness of his/her illness. We are imprisoned by our culture. The militaristic culture is one of the most dreadful cultures in the world but we do not even know how our prison looks like and we cannot even shake the bars, because we do not see them (Wahlström 1991). Violence is propagated so much in this world and has been done for so many years that thinking models or images of using violence is our prison.

Peace and environmental education gives us alternatives. The culture has created power systems, which are far from equality. Peace education promotes equality, in all relationships, between men and women, between workers and owners, nations and races. The tasks are huge, but for our common survival, important.

It is a task of this generation and future ones to change all education to peace and environmental education. Peace and environmental education promotes wisdom, empathy, morality and responsibility. We need those qualities now more than ever before. The Mother Earth is so ill, that every new war is dangerous. Environment itself cannot stand anymore the madness of our militaristic civilization.

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I finish this report with a poem, written in 1984 by Yusuf Kassam, who worked previously as the programme director of the International Adult Education Council.

Education for peace

I need to be at peace with myself.
If I am not at peace with myself
How can I live in peace and harmony with others?
But how can I be at peace with myself
When I think of
Apartheid
Nuclear missiles
Poverty, hunger
Palestine
The list is long.

How can I be at peace with myself
when others are denied peace?
Yet
it is only when I think
Of social injustice
And act on it,
It is only when I think
Of the possibility of nuclear holocaust
And act on it,
It is only when I educate for peace
₁hat I can be at peace with myself.

                                Yusuf Kassam

REFERENCES

Anon. 1978. Yhteinen Maailma. (Common world). The Finnish UNESCO committee. Espoo: Weilin & Göös.

Aboud, F. 1988. Children & Prejudice. New York: Basil Blackwell.

Adams, D. & Bosch, S. 1978. The myth that war is intrisinc to human nature discourages action for peace by young people. In Ramirez, R.Hinde & J. Groebel (eds.) Essays on Violence. Sevilla: Publ. Univ. of Sevilla, 121-138.

Allport, G. 1954. The Nature of Prejudice. New York: Doubleday Ancor Books.

Batisse, M. 1973. Environmental Problems and the Scientist. Bulletin of the Atomic Scientits, February, 15-21.

Bjerstedt, Å. 1985. Lära för fred. (Learning for the peace). Stockholm: Liber.

Bjerstedt, Å. 1988. Hur utvecklar vi en framtisberedskap hos skolans elever? (How do we develop a preparedness for the future among the pupils of our schools?) Särtryck och småtryck. No.622

Bjestedt, Å. 1989. Explorations of enemy images using an associative technique. Educational and Psychological Interactions, No. 95. Malmö: Scnool of Education.

Bjerstedt, Å. 1990. Peace education: an interview with Tom Roderick, Educators for social responsibility. In Å. Bjerstedt (ed.) Peace, environment and education. Malmö: Graphic Systems.

Bjerstedt, Å. 1990 b. Towards a rationale and didactics of peace education. In Å. Bjerstedt (ed.) Education for peace in the nineties. A conference report. Peace Education Reports. No 1. Malmö School of Education. University of Lund.

Bjerstedt, Å. & Gustafsson, E. 1986. Towards peace education (H): Abstracts on some reports related to conflict resolution and peace education. Special bulletin från Institution för pedagogik lärarhögskolan. Malmö.

Brandt, G. 1986. The realization of anti-racist teaching. London & New York: The Falmer Press.

Boulding, E. 1988. Building a global civic culture. Education for an interdependent world. New York: Teachers College Press.

Brock-Utne, B. 1989. Feministic perspectives on peace and peace education. New York: Pergamon Press.

Caduto, M. 1983. Toward a comprehensive strategy for enviromental values in education. Journal of Environmental Education 14(4), 12-18.

Caduto, M. 1983a. A review of environmental values in education. Journal of Environmental Education 14(3), 12-18.

Cilligan, C. 1982. In a different Voice. Cambridge: M.A. Harward University Press.

Conard, B. 1988. Cooperative learning and Prejudice Reduction. Social Education. April/May, 283-286.

Dasdamirov, A.F. 1977. Some psychological aspects of ethnic- national specificity of inviduality. Sovjetskaja Etnografija 3, 3-13.

Deutsch, M. 1973. The resolution of conflict. Constructive and destructive processes. New Haven and London: Yale University Press.

Deutsch, M. 1989. Peace Education: cooperative learning, conflict resolution training, and the use of constructive controversy. Reprints and miniprints. Department of Educational and Psychological Research. Malmö School of Education. University of Lund. 671.

Engeström, Y., Engeström, R., Haavisto, V. & Pihlaja, J. 1990. From discrete interactions to activity systems changing in time: Expansive distributed learning in a health center. The 2nd International congress for Research on Activity Theory, Lahti, Finland, May 21-25.

Ennis, R. 1983. Goals for a Critical Thinking Curriculum. Illinois thinking Project. University of Illinois. Champaign-Urbana.

Flavell, J. H. 1974. The development of inferences about others. In T. Mishel, (Ed.) Understanding other persons. Totowa, NJ. Rowaman Littlefield.

Freire, P. 1972. Pedagogy of the Oppressed. Sweed and Ward: London.

Freire, P. 1973. Education for Critical Consciousness. London: Sheed and Ward.

Freinet, C. 1975. För folkets skola. (The school for people) Stockholm: Wahlström & Widstrand.

Galtung, J. 1974. Schooling and Future Society. In M. Haavelsrud (ed.) Education for Peace, Reflection and Action. Proc. of the 1st World Conf. of the World Curriculum Council for Curriculum and Instruction. University of Kemt. UK. Sept. Guildford: Science and technology Press.

Galtung, J. 1976. `Peace education: problems and conflicts` In M. Haavelsrud (ed.) Education for Peace. Guilford: IPC Science and Technology Press.

Goldstein, J. Aggression and crimes of violence. New York: Oxford University Press.

Gustafsson, E. & Yebio, B. 1977. Utveckling av global medansvar i skolan: undervisningshandledning. Pedagogiskpsykologiska institutionen. Lärarhögskolan i Malmö. Lunds Universitet, 23.

Habermas, J. 1981. Theorie des Kommunikativen Handlens, (The theory of Communicative Agtion), Bols 1 and 2. Frankfurt: Suhrkamp Verlag.

Habermas, J. 1990. Jürgen Habermans; Morality, Society and Ethics. An Interview with Torben Hviid Nielsen. Acta Sociologica (33), 2, 93-114.

Heater, D. 1984. Peace Through Education: The Conribution of the Council for Ecucation in World Citizeship. Brighton: Falmer Press.

Heinrichs, B. & Macintosh, R. 1990. Peace on earth- Peace with the earth: Militarism and the environment. Peace Education News 11, 16-20.

Henry, J. 1989. Meaning and Practice in experiential learning. In S. W. Weil & McGill. Making sense of experiential learning. The Society for Research into Higher Education and Open University Press. Great Britain: St Edmundbury Press Limited., 25-37.

Hicks, D. 1988. Education for peace. London & New York: Routledge.

Hoffman, M.L. 1977. Personality and Social Development. Annual Review of Psychology 28, 295-321.

Hungerford, H.R. & Volk, T.L. 1990. Changing Learner Behaviour Through Environmental Education. Journal of Environmental Education 21 (3), 8-21.

Johnson, D. & Johnson, R. 1985. Student-Student Interaction: Ignored but Powerful. Journal of Teacher Education, July-August, 23.

Johnson, D. & Johnson, R. 1987. Learning together & alone. Cooperative. Competive & Individualistic Learning. New Jersey: Prentice Hall, Inc.

Keiny, S. & Shachak, M. 1987. Educational model for environmental-cognition development. International Journal of Science Education 9(49), 449-458.

Kekkonen, H. 1983. Window for the future. Helsinki: Peace Education Institute

Kekkonen, H. 1990. Rauhankirja (Peace book). Helsinki: Peace Education.

Keldorff, S. 1990. From external to internal enemy. Approaching a new ethics of a reunited Europe. Questions for the education for peace. Lecture and paper to the 3. Int. Teachers for Peace Congress, Budapest, Hungary.

Kolb, D. A. 1984. Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, N. J. Prentice-Hall.

Kohlberg, L. 1973. The Child as Moral Philosopher. In Barry I. Chazan and J. Soltis (eds.) Moral Education. New York: Colobia University Press, 132-135.

Kohlberg, L. and Turiel, E. 1976 "moral development and education." In Gerald S. Lessa (Ed.) Psychology and Educational Practice. Glenview, Ill.: Scott Foresman and Co., 416.

Kohlberg, L. 1981. The Philosophy of moral development: Moral stages and the idea of justice. vol. 1. San Francisco: Harper and Row 1, 47.

Käpylä, M. 1990. Ympäristökasvatus. Paper presented in Meetings of Educational Research. University of Jyväskylä, 23 th September.

Laine, E., Malinen, P. & Sihvola, O. 1986. Kansainvälisyyskasvatuksen tutkimus ja opetus. (Teaching and Educating International Understanding.) Jyväskylän yliopisto. Opettajankoulutuslaitos. Katsauksia 15, 11-25.

Liikanen, P. & Vallström, K. 1988. Kansainvälisyyskasvatuksen asema ja tehdostaminen opettajien koulutuksessa. Intia- viikko normaalikoulun ala-asteella. (International education and its emphasizing in teacher training in Finland. India-week at the lower level of normal school). University of Jyväskylä, Teacher Training Department. Research 39.

Macalay, J. & Berkowitz, L. 1970. Altruism and helping behavior. New York: Academic Press.

Mitsaskos, C. 1976. FAMES Project. Final report. Boston University. Mass. School of Education. Longview Foundation for Education in World Affairs and International Understanding, Accokeek. Md.

Montagu, A. 1966. On being human. New York: Harthorn Books.

Orlick, T. 1979. The Cooperative Games and Sport Book-Challenge without competition. London: Writers and Readers publishing.

Osterman, A. & Niclas, H. 1984. Vorurteile und Feindbilder. 3. Auflage. Beltz Verlag: Weinhein und Basel.

Peters, R.S. 1981. Moral development and Moral Education. London: George Allen & Unwin.

Pettigrew, T. F. 1981. The mental Health Impact. In Impacts of Racism on White Americans edited by B.P. Bowser and R. G. Hunt. Revealy Hills: Sager, 97-118.

Polack, F. 1972. The image of the future. (E. Boulding, Trans. &Abr.) San Francisco: Jossey-Bass/Elsevier.(Original work published 1955).

Rawls, J. 1971. A Theory of Justice.Harvard University Press: Cambridge, Mass.

Reardon, B. 1985. Sexism and war system. New York: Teachers College Press.

Reardon, B. 1988. Educating for global responsibility. Teacher-designed Curricula for peace education, K-12. New York: Teachers College Press.

Reimer, J., Paolitto, D. &Hersh, R. 1979. Promoting moral growth. From Piaget to Kohlberg. New York & London: Longman.

Richarson, R. Materials, resources and methods. In M. Cole (ed.) Education for Equality. London & New York. Routledge, 53-74.

Schwass, R. 1986. The university and the concept of environmental education universities and environmental education. UNESCO and the International Association of Universities. France: UNESCO.

Skolimowski, H. S. 1984. Ekofilosofia (Ekofilosofi). Helsinki. Kirjayhtymä.

Speier, M. 1987. Canadian Peace and World Order Studies. A curriculum guide. Toronto: The Canadian Services Bureau of the Association of Canadian Community Colleges.

Taylor, P. W. 1986. Respect for nature. The theory of environmental ethics. Princenton University Press.

UNESCO 1960. Montreal Declaration from UNESCO's 2nd International Conference on Adult Education.

UNESCO 1988. Man Belongs to Earth. UNESCO's Man and Biospehere Programme. Unesco. Imprimerie Bietlot Freres, Fleurus: Belgium.

Wahls, D. 1988. Critical thinking to Reduce Prejudice. Social Education. April/ - May, 280-282.

Wahlström, R. 1986. On the psychological basis of peace education: Enemy images and development of moral judgement. Paper presented at the Eleventh Conference of IPRA, International Peace Research Association, Sussex, April 13-18.

Wahlström, R. 1987. Enemy Image as a psychological antecedent of warfare. In M. Ramiez et al (eds.) Essays on Violance. Sevilla: publ. de la universidad de Sevilla, 21-45.

Wahlström, R. 1988. Educating preschool children for shared responsibility and peace. University of Lund. Malmö School of Education. Department of Educational and Psychological Research. Reprints and miniprints 560.

Wahlström, R. 1989. Enemy images and peace education. University of Lund. Malmö School of Education. Department of Educational and Psychological Research. Reprints and miniprints 660.

Wahlström, R. 1991. Peace education challenges the cultures of militarism. University of Lund. Malmo School of Education. Department of Educational and Psychological Research. Reprints and miniprints 11.

Wahlström, R. 1991. Rauhan- ja kansainvälisyyskasvatus koulussa. Peruskoulun ala-asteen kokeilu. (Peace and International Education at school. An experimental programme at primary school). University of Jyväskylä. Institive for Educational Sciences (innress).

Weil, S. & McGill, I. 1989. A Framework for Making sense of experiential learning. In S. Warner Weil and I. McGill: Making sense of experiential learning. Great Britain: St Edmundsbury Press Limited, 3-24.

Van IJzendoorn, M. H. 1985. Moral judgment and concern about nuclear war. University of Leiden, Netherlands. Department of Education. Unpublished paper.

Van Marte, S. Sunship Earth 1974 Martinsville. Indiana: American Camping Association.

Vriens, L. 1990. Peace Education in the nineties: a reappraisal of values and options. In Å. Bjerstedt (ed.) Peace, environment and education. Malmö: Graphic Systems, 5-20.

Wrightsman, L. S. 1972. Social Psychology in the seventies. Monterey: Brooks/Cole publishing company.

Ziegler, W. 1987. Mindbook for imagining/inventing a world withouth weapons. Denver CO: Future Invention Associates.

APPENDIX 1:

'THE SEVILLE STATEMENT ON VIOLENCE'.

Believing that it is our responsibility to address from our particular disciplines
the most dangerous and destructive activities of our species, violence and war;
recognizing that science is a human cultural product which cannot be definitive
or all encompassing; and gratefully acknowledging the support of the authorities
of Seville and representatives of the Spanish UNESCO; we, the undersigned
scholars from around the world and from relevant sciences, have met and arrived
at the following Statement on Violence. In it, we challenge a number of alleged
biological findings that have been used, even by some in our disciplines, to
justify violence and war. Because the alleged findings have contributed to an
atmosphere of pessimism in our time, we submit that the open, considered
rejections of these mis-statements can contribute significantly to the Interna-
tional Year of Peace.

Misuse of scientific theories and data to justify violence and war is not new
but has been made since the advent of modern science. For example, the theory
of evolution has been used to justify not only war, but also genocide, colonialis-
m, and suppression of the weak.

We state our position in the form of five propositions. We are aware that
there are many other issues about violence and war that could be fruitfully
addressed from the standpoint of our disciplines, but we restrict ourselves here
to what we consider a most important first step.

IT IS SCIENTIFICALLY INCORRECT to say that we have inherited a tenden-
cy to make war from our animal ancestors. Although fighting occurs widely
throughout an'mal species, only a few cases of destructive intra-species fighting
between organized groups have ever been reported among naturally living
species, and none of these involve the use of tools designed to be weapons.
Normal predatory feeding upon other species cannot be equated with intra-
species violence. Warfare is a peculiarly human phenomenon and does not occur
in other animals.

The fact that warfare has changed so radically over time indicates that it
is a product of culture. Its biological connection is primarily through language
which makes possible the co-ordination of groups, the transmission of technology,

and the use of tools. War is biologically possible, but is is not inevitable, as evidenced by its variation in occurrence and nature over time and space. There are cultures which have not engaged in war for centuries, and there are cultures which have engaged in war frequently at some times and not at others.

IT IS SCIENTIFICALLY INCORRECT to say that war or any other violent behaviour is genetically programmed into our human nature. While genes are involved at all levels of nervous system function, they provide a developmental potential that can be ac ualized only in conjunction with the ecological and social environment. While individuals vary in their predispositions to be affected by their experience, it is the interaction between their genetic endowment and conditions of nurturance that determines their personalities. Except for rare pathologies, the genes do not produce individuals necessarily predisposed to violence. Neither do they determine the opposite. While genes are co-involved in establishing our behavioural capacities, they do not by themselves specify the outcome.

IT IS SCIENTIFICALLY INCORRECT to say that in the course of human evolution there has been a selection for aggressive behaviour more than for other kinds of behaviour. In all well-studied species, status within the group is achieved by the ability to co-operate and to fulfill social functions relevant to the structure of that group. 'Dominance' involves social bondings and affiliations: it is not simply a matter of the possession and use of superior physical power, although it does involve aggressive behaviours. Where genetic selection for aggressive behaviour has been artificially instituted in animals, it has rapidly succeeded in producing hyper-aggressive individuals; this indicates that aggression was not maximally selected under natural conditions. When such experimentally-created hyperaggressive animals are present in a social group, they either disrupt its social structure or are driven out. Violence is neither in our evolutionary legacy nor in our genes.

IT IS SCIENTIFICALLY INCORRECT to say that humans have a 'violent brain'. While we do have the neural apparatus to act violently, it is not automatically activated by internal or external stimuli. Like higher primates and unlike other animals, our higher neural processes filter such stimuli before they can be acted upon. How we act is shaped by how we have been conditioned and socialized. There is nothing in our neurophysiology that compels us to react violently.

IT IS SCIENTIFICALLY INCORRECT to say that war is caused by 'instict' or any single motivation. The emergence of modern warfare has been a journey

from the primacy of emotional and motivational factors, sometimes called 'instincts', to the primacy of cognitive factors. Modern war involves institutional use of personal characteristics such as obedience, suggestibility, and idealism, social skills such as language, and rational considerations such as cost-calculation, planning, and information processing. The technology of modern war has exaggerated traits associated with violence both in the training of actual combatants and in the preparation of support for war in the general population. As a result of this exaggeration, such traits are often mistaken to be the causes rather than the consequences of the process.

We conclude that biology does not condemn humanity to war, and that humanity can be freed from the bondage of biological pessimism and empowered with confidence to undertake the transformative tasks needed in this International Year of Peace and in the years to come. Although these tasks are mainly institutional and collective, they also rest upon the consciousness of individual participants for whom pessimism and optimism are crucial factors. Just as 'wars begin in the minds of men', peace also begins in our minds. The same species who invented war is capable of inventing peace. The responsibility lies with each of us.

Seville, 16 May, 1986.

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APPENDIX 2. PEACE AND INTERNATIONAL EDUCATION PROJECT IN JYVÄSKYLÄ
THEMES AND ACTIVITY PROPOSALS

WEEK	THEMES AND ACTIVITY PROPOSALS
33-36	Students are acquainted with the class, school personnel, co-planning. Getting familiar with the school journey. Planning of classrules, planning of support-pair activity learning objectives, forms of being together. Discussions of the purposes of school and of how to help others to learn.

MAN AND NATURE

37-39	Discussions of man's dependence on nature and of the importance of respecting nature, getting to know harvest yielded by autumn, from corn to bread, observing the environment and its well-being and man's well-being.

GETTING FAMILIAR WITH DIFFERENCE

40-44	Getting familiar with children who look different, the gypsies, foreigners, the handicapped, Lappish; with different dialects, discussions of friendship and conflicts and their solutions.

FATHERLAND AND THE WORLD

45-49	Discussions of Finland as one of the world's countries, the Finnish flag and scenery; what makes Finland known in the world. Father's day. Violence and peaceful ways. Culture and customs of neighbouring countries. The common world. Creating ideas for peaceful heroes and heroines.

GHRISTMAS AND JOY OF GIVING

50-51	The message of Christmas, the importance of human love, joy and helpfulness; different ways of giving and caring in Finland, collections, the Christmas of the lonely and the poor. Choice of friendship targets and planning of cooperation with them. Getting familiar with the work of UNICEFF, Unesco etc.

WORK AND THE FUTURE

1-5 Importance of helping and caring for others in the cold North. How do we help animals, plants. How does work manifest itself. Importance of work. Getting to know different occupations, parents' work. Taking the role of helpmate for cleaning, cooking, caretaking and teaching personnel etc. Future workshops. Planning a cleaning-up project of the classroom and carrying it out. Setting up a box where children can drop notes telling what kind of help they expect from others and how they can help others.

MAN AND WELL-BEING

6-11 Enjoyment of the art, theater, poetry. Kalevala day festivities. Making own theater, poetry and art exhibitions; getting to know mass media communication, making own class paper, radio program etc. World Food Day. Organizing a party for an elderly person who has been chosen as a mutual friend for the class. Making visits to the home of this elderly person and keeping up friendly contacts with him or her.

FESTIVALS HERE AND ELSEWHERE

12-22 How a plant begins to grow, from seed to flower, taking care of a plant, getting an aquarium and small fish, taking care of nature during excursions. Learning to recognize in this connection all the plants and animals and natural phenomena which are encountered during nature excursions. Discussions of how to protect nature. Mother and child birth. Mother's day celebration.

APPENDIX 3.

PEACE AND INTERNATIONAL EDUCATION PROJECT IN JYVÄSKYLÄ

EVALUATION SHEET

Name of Evaluator _____

Grade where the activity was implemented _____ _____

Description of activitity _____

_____

_____

_____

Evaluation of activity _____

_____

_____

_____

The following difficul .es came out in the implementation process

_____

_____

One should have changed the followings

_____

_____

_____

The activity promoted the following objects at peace and international education (put x to suitable places)

Self-Esteem ___, Critical thinking ___, Role taking ability ___, Tolerance ___, Intention to promote justice ___, Helping ability ___, Empathy ___, Peace-orientation ___, Cooperation ___ and Intention to profect nature ___.

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method.(92s.) ISBN 951-679-773-3 .... 38.-

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