Quality Criteria for ESD-Schools

Guidelines to enhance the quality of Education for Sustainable Development



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Quality Criteria for ESD-Schools

A document by the SEED and the ENSI networks

for international debate

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Quality Criteria set can be downloaded from:
www.seed-eu.net

Preface

This publication targets schools and educational authorities engaged in Education for Sustainable Development (ESD). It presents a proposal for a non-exhaustive list of 'quality criteria' to be used as a starting point for reflections, debates and further development regarding future work on ESD among educational officials, teachers, headmasters, parents, and students.

We have proposed the term 'ESD-schools' as a new term which is different from the commonly used terms 'eco-schools' or 'green schools'. By using a new term we want to stress that there are new challenges for schools that wish to engage in ESD-oriented development. ESD is not only dealing with aspects of people's dependence on the quality of the environment and access to natural resources now and in the future, but also aspects of participation, self efficacy, equality and social justice are essential perspectives in preparing pupils for their engagement in sustainable development.
However, experience and achievements derived from 'eco-schools', 'green schools' and from environmental education in general and from a number of other overarching pedagogical fields like peace education, health education, citizenship education and global education are highly relevant in this endeavour. There are moreover many examples that demonstrate that schools are addressing ESD without identifying it as such.

In the present context, ESD-schools are schools that have chosen Education for Sustainable Development as a central part of their mission and their educational plan. They consider sustainable development as a main principle to keep in mind when planning the school's daily life and long-term changes and development. Such schools are increasing in number and improving in quality internationally under different names. They are engaged in profound changes regarding the aims and roles of educational institutions. They aim to offer students a context for developing active citizenship and participation embracing the complexity of the combined social, economic, political and environmental dimensions of sustainable development.

This proposal of quality criteria is one of the outcomes of the COMENIUS III European network 'School Development through Environmental Education' (SEED). The work of SEED is a concrete example of the activities of ENSI, a decentralized network of national authorities and research institutions. ENSI is a UNESCO partner within the UN Decade for Sustainable Development (DESD), 2005-2014, aimed at involving all countries in concrete ESD strategies, development and review.

This work takes into account international reference documents focusing on ESD and uses experience from school development and other theoretical and practical experience built within the ENSI and SEED networks. It is inspired by the analysis of research reports on 'Eco-school development' produced by researchers and/or national representatives from 13 countries (see list annexed). The analysis of country reports is published separately. The three authors would like to acknowledge the material provided in the country reports.

An earlier draft of this publication was sent for consultation to a number of prominent educators in the field of eco-school development, ESD and general education, (see list under acknowledgements, annexed). Their comments and proposals for improvement formed the basis for drafting this published version. We express our sincere gratitude for our colleagues' contributions that have improved this work considerably even if we have not been able to follow all suggestions. At the same time we take the full responsibility for the final text.

To give more equal access to the materials presented here, the original English manuscript has been translated into a number of languages and the translators are acknowledged for each language version. We appreciate in the addition to this translation work the checking work done by Nicola Bedlington at the ENSI secretariat.
Translations into further languages are highly encouraged and no copyright restricts the publication of such versions, as long as they include an appropriate reference to this original material.

Søren Breiting, Michela Mayer and Finn Mogensen

The development of quality criteria as part of ENSI's work

By Günther Pfaffenwimmer, President of ENSI

ENSI has been active in the discussion around and development of ECO-Schools and of Quality Criteria since June 1995, in line with ENSI's work programme and policy direction.

In both fields, ENSI and its national actors were involved in rich and extensive developments in all member and partner countries.

In 2002 when drawing up the proposal for the EU COMENIUS III Network project "School Development through Environmental Education" SEED, ENSI decided to contribute to this initiative and in collaboration with the SEED network launched a research project which included two stages.

The first stage of the research aimed to identify the implicit and explicit criteria inspired by values of Environmental Education, as used to guide, support or award Eco-Schools involved in incorporating principles and actions for sustainability in whole school plans. This stage also involved identifying and documenting innovative case studies in this area. The information collected and reflected on from this phase of the project has resulted in the SEED/ENSI publication: "A Comparative Study on Eco-school Development Process" (Mogensen & Mayer, 2005).

Stimulated by the comparative study, the second stage of the research is the proposal of the present list of Quality Criteria for ESD-schools. We are confident that the results of this study will support the international development of criteria for Education for Sustainable Development.

The SEED network

By Johannes Tschapka, SEED co-ordinator

The European COMENIUS III network, "School Development through Environmental Education" (SEED) is a group of educational authorities and institutes that promote environmental education as a driving force for school development. Within the 14 European SEED partner countries and 6 SEED member countries, Environmental Education fosters an innovative culture of teaching and learning that promotes Education for Sustainability. SEED invites schools, teacher education institutes and educational authorities to work together, to learn from each other's experiences and to accumulate their knowledge in working towards sustainable development.

Targets

Because of the creation of the COMENIUS III networks, SEED is able to encourage co-operation among its stakeholders by working on existing, completed and prospective COMENIUS projects. Stakeholders associated with the network benefit from these environmental education developments. SEED also facilitates a close dialogue and better understanding among policy makers and practitioners in the various education systems. The ultimate target group is the pupils who benefit from innovative teaching practices and modern teaching and learning pedagogies.

Quality criteria

SEED offers a systematic set of criteria that are useful for the Eco-schools movement in its partner and member countries and in fact for any school's engagement in ESD, not as the final answer but as a stimulus for the school's own vision and planning.

SEED follows an understanding of Environmental Education and Education for Sustainability as a teaching and learning process which aim to foster democratic participation of students as active citizens for social and environmental change. Underpinning the goals of the research is a critical examination of these processes of change within the development of an ESD-school.

This Quality Criteria for ESD-Schools in hand is also available in the following languages:

Catalan:

Criteris de qualitat per a Escoles Sostenibles - Orientacions per a la millora de la qualitat en l'Educació per al Desenvolupament Sostenible

Danish:

Kvalitetskriterier for ESD-skoler - En guide til at fremme kvaliteten af uddannelse for bæredygtig udvikling

French:

Critères de qualité pour les établissements scolaires éco-responsables (ESD) - Guide pour l'amélioration de la qualité de l'éducation à l'environnement pour un développement durable

German:

Bildung für Nachhaltigen Entwicklung in Schulen - Leitfaden zur Entwicklung von Qualitätskriterien

Hungarian:

A Fenntartható Fejlődés iskoláinak minőségi kritériumai - Útmutató a Fenntartható Fejlődést szolgáló Pedagógia minőségének javítására.

Italian:

Criteri di qualità per 'Scuole per lo Sviluppo Sostenibile' - Linee guida per il miglioramento continuo della qualità nell'Educazione allo Sviluppo Sostenibile

Spanish:

Criterios de Calidad en la Educación para el desarrollo sostenible escolar – Orientaciones para favorecer la calidad de la Educación para el desarrollo sostenible

Introduction

The aim of the publication

The following non-exhaustive list of quality criteria is an attempt to provide a starting point for schools that wish to make use of the focus on ESD as a vehicle for the school's own development. A first step for an ESD inspired school development is to agree on what the school wants to achieve and the tools proposed for an implicit or explicit evaluation of these achievements that are oriented towards the development itself.

In our view, a set of quality criteria is an instrument which summarises an ESD philosophy, that must be constructed and accepted jointly by all school stakeholders, and that cannot be considered as a tool for 'quality control', but as an opportunity for 'quality enhancement', open to on going debate in a participatory way. With this view, quality criteria should give orientation and inspiration but should not be confused with 'performance indicators' or the like. In fact, a set of criteria may be considered as a 'translation' of a set of shared values formulated in terms that are more explicit and closer to the practice but not as prescriptive and limited as performance indicators.

As such, the proposed list of criteria is aimed at facilitating discussions within the school and with all stakeholders to clarify the main aims and changes to orient school development to ESD and to develop the school's own list of quality criteria, adapted to the school's own situation and the school's plans for change.

The shared conception at the basis of these criteria is inspired by a common international vision of ESD in which the really important achievements are related to the teaching and learning processes and the school climate and organisation, rather than to the practical actions or outcomes in the school or in the community.

Despite the interest from many sides to focus on ESD as a short-term change-agent toward more sustainable living we advocate that the central agenda of ESD has to be the construction of new ways of envisioning our common future, experiencing our planet and participating in the resolution of societal problems and issues. Accordingly this is a material to stimulate focused development in school with the participation of relevant partners to achieve change that

improves the school's capacity to provide adequate learning for the students in accordance with future challenges in a changing world.

This work draws on an analysis of extensive national reports of eco-school development in the following countries: Australia, Austria, Belgium - Flemish Community, Denmark, Finland, Germany, Greece, Hungary, Italy, Korea, Norway, Spain - Catalonia, and Sweden (Mogensen and Mayer, 2005). The present authors have combined the information from these country reports with their own experience in a number of countries and with experience and ideas presented in international literature.

The national reports were written with different interpretations of the term 'eco-school' typically linked to different ideas of environmental education and of the possible contribution of environmental education and education for sustainable development to school development as a whole. The main aim of the study was to collect information about explicit and implicit 'criteria' used in each country to define and assess an eco-school and eco-school development, and 'scenarios' for EE and ESD implicitly used, all from the perspective of the national 'reporter'.

The authors have aimed at developing the term 'ESD-schools' further for schools that wish to take the challenge of ESD in all its complexity and to make use of that effort for the school's general development. We regard ongoing reflection and exchange of information, experience and ideas among students and teachers as the lifeblood of a dynamic school.

A school engaged in ESD is engaged in learning for the future, by inviting students and teachers to enter a 'culture of complexity', by using critical thinking to explore and challenge, in clarifying values, reflecting on the learning value of taking action and of participation, revising all subjects and the pedagogy in the light of ESD. These can all be central elements in developing the students' action competence. Such a school is not dominated by traditional hierarchical structures but by dynamic networks and the demands of local and global co-operation. In this context, the idea of a school as a 'complex system' and as a 'learning organization' stimulates new ways of thinking by looking at the school climate and at internal relationships. Of course, such schools are aware of the importance of 'fieldwork' and of the pedagogical value of reaching visible, physical, changes and outcomes at school and in the local community, but these changes and

outcomes are considered as 'learning tools' for deeper educational and cultural change and not as goals in themselves.

In a school that functions well the competence of the school is much more than just the sum of competences of the individuals. It depends on how well the school is able to handle experience, reflections, innovations and co-operation. As individuals our experience is stored for later use in our memory. But where is the experience of a school as an organization stored? It makes sense to understand the school's culture as an expression of the school's collective 'memory', i.e. that new experience, reflections, innovations etc. have to be incorporated in the school culture and change the way people interact, discuss and do things. It is the mandate of the school principal to facilitate such processes, but aim, process and organization should be based on a shared understanding. The theory and practice of 'schools as learning organizations' will be helpful for the school's general development, not only in the field of ESD.

The present approach encourages the integration of ESD in the normal life of the school and considers engagement in ESD not as an extra burden for teachers and headmaster, but as an opportunity for improving the existing teaching and learning and to provide innovations useful for the whole school.

How the quality criteria are organised and how to use them
In the following chapters, the criteria are presented in 3 main groups:

1. **Quality criteria regarding the quality of teaching and learning processes**

2. **Quality criteria regarding the school policy and organisation**

3. **Quality criteria regarding the school's external relations**

Each group of criteria is divided in smaller areas. For each of these you will find a short description of the area (a rationale) and a presentation of a number of criteria. Both criteria and areas are partially overlapping, This kind

of overlap and interaction should not be seen as a limitation of the formulation but as an indication of the many mechanisms at play in a complex institution like a school. Each area is introduced by an example of school practice that gives an idea of what the criteria could mean in reality. The examples are short case stories inspired by real schools' practices collected in the international context. Because they are intended to offer a short example, only some aspects are presented, but in the real case studies you will also find obstacles and problems.

In writing the rationale and example for each area the authors have tried to balance different national and trans-national perspectives. In this process they have been inspired by international documents on EE and on ESD.
The figure on next page provides an overview of the groups and areas of quality criteria and might also be helpful for the school when the school formulates its own quality criteria.
The quality criteria in these areas should never be accepted without a serious discussion and decision among the important stakeholders of the school. We expect a great number of deletions, revisions and new formulations to be the result of such a discussion. For that reason we end each group of criteria with 'open dots' – symbolizing the addition of new or revised ones.

This process should be interactive: ESD means involving the whole school in an action research–like process, accepting that school development is not only a complex process but also partly unforeseeable. It needs structure with regular assessment and revision of the quality criteria proposed and the concrete action plans.

The reader will remark that most of the proposed quality criteria are not only relevant to ESD efforts but could be relevant for many other fields that stimulate the development of the school and the modernization of teaching and learning possibilities at the school. Our view is that it is the combination of the listed quality criteria in a locally adapted version that could drive the ESD development in a school to make the school a real 'ESD-school'.
School development of this kind needs active participation and may become an arena where students and teachers are able to exercise their knowledge and competencies for building sustainable development into the society.
There are no pre-determined ways to sustainable development:
The journey is the goal we are aiming at.

Quality criteria regarding the quality of teaching and learning processes	Quality criteria regarding school policy and organisation	Quality criteria regarding the school's external relations
1. Area of teaching-learning approach	10. Area of school policy and planning	14. Area of community cooperation
2. Area of visible outcomes a school and in local community	11. Area of school climate	15. Area of networking and partnerships
3. Area of perspectives for the future	12. Area of school management	
4. Area of a 'culture of complexity'	13. Area of reflection and evaluation of ESD initiatives at school level	
5. Area of critical thinking and the language of possibility		
6. Area of value clarification and development		
7. Area of action-based perspective		
8. Area of participation		
9. Area of subject matter		

1. Quality criteria in the area of teaching-learning approaches/processes

Example

A grade 8 class was investigating the villagers' use of pesticides in their local community. As part of that work they visited a small farmer growing spring onions on hired land. He had arrived a year ago with his family from a part of the country where the rainfall had diminished, because of deforestation, and many families suffered a lot.

The students got responses to their prepared questions about his use of pesticides and how he was affected. It was clear that he had many health problems by using them, but on the other hand it meant frequent crops of spring onions. He used a number of saw beds so he always had spring onions at different stages of development. Once a month he harvested a crop and brought it to a regional market to get the best price. From this income he could feed his family living in their common shack, and pay the rent for the land, and most of the money went to the remaining part of the family still living in their old area.

When leaving the field the class passed a saw bed with spring onions that didn't look as fresh and healthy as the other spring onions - many had brown parts on the leaves due to an attack of larvae of moths. To their surprise, the farmer told the class that these spring onions were for their own consumption in the family and accordingly he did not like to treat them with pesticides. The eager students continued with questions about why he did not sell such untreated spring onions on the market and he told the class that he couldn't get a good price for them at the market because they didn't look as good as the sprayed ones.

Back in class the students were keen to say very negative things about the farmer because they found he had double moral standards just to get money. The teacher helped them to see the farmer's dilemma as a personal conflict and moved the attention of the students to the concept of the 'market mechanism'. Because they were very upset about what they had seen the class wanted to investigate this in more depth. After a brainstorm they decided to investigate their parents' attitudes about this question and also to make a practical experiment at their small local market.

They managed to buy a portion of nice looking spring onions and a portion of the spring onions without pesticides and brought them to the market. They had prepared big signs to explain the difference and wanted to sell them for the

same price. At the market they made a survey of consumers' reactions and opinions. The project ended with an exhibition and hearing where the class described their findings and worries and asked the community in what direction they would like this issue to develop.

Rationale

Sustainable development is not a fixed thing but a quest for developing our daily life and communities in directions that benefit most people now and in the future and at the same time minimize our negative environmental impact. This requires active, creative and critical citizens that are good at overcoming problems and conflicts in co-operation, and able to combine theoretical knowledge with practical innovations and ideas. As a consequence the teaching and learning approach must have the learner at the centre and provide contexts to develop students' own ideas, values and perspectives. Teachers must consider students as active agents in the construction of their knowledge. As the issues related to sustainable development are often controversial and complicated it is important to be able to handle disagreement and complexity (see later). The focus on ESD can be used in the school as learning opportunities to teach the core subject areas, often with practical implications for students' daily life and the local community. At the same time this approach can enhance the students' self-esteem.

Quality criteria in the area of the teaching-learning approach

- The teachers listen to and value the concerns, experiences, ideas and expectations of the students, and their plans are 'flexible' and open for changes.
- The teachers encourage cooperative learning and experiential learning.
- The teaching takes into account the value of practical activities by linking them to students' concept development and theory construction.
- The teachers facilitate students' participation and provide contexts for the development of students' own learning, ideas and perspectives.
- The teachers search for ways to evaluate and assess students' achievement consistent with the above mentioned criteria.
- .....

2. Quality criteria in the area of visible outcomes at school and in the local community

Example

The teachers at a village school were worried about a forest just outside the school grounds. It was a forest, abandoned for years, where few people in the village dared to go for a walk. The children were fascinated by the forest and they wanted to explore it and to use it for their activities.

Children proposed to ask the community and their parents for help to make the forest cleaner, without abandoned waste, and more accessible, and with their teachers they made specific plans of what to do and when to do it. During three days work with the help of the community the abandoned forest was made more appealing to people. Other wild plants of the area were planted in order to form more plant communities and artistic-looking stones were displayed along an exploration lane. The whole community continued to help in ground preparation in order to plant other trees of different species.

The forest is now used as an educational site. It is an extension of the school ground but also a kind of 'botanical garden' to observe all year long. Special school programmes deal with different aspects of the forest during the year, and teachers and children take care of it regularly. The villagers come now to the school for jogging and exercising and there is a large use of the forest park in holiday time.

Rationale

ESD calls for practical actions and decision-making - schools cannot only speak about the future but must act for the future. Nevertheless the main aim of school actions is not the physical/technical visible outcomes but the students' learning and involvement.

Educational goals and sustainable development goals do not always have the same priorities. Importance in education is not so much what issue is taken into account and/or what visible outcome is expected from the action, but whether the focus on the issue comes from student's ideas and opinions, and whether the teachers take care of the development of complex, critical thinking, and of the clarification of values, when students investigate and try to solve the problem.

Water or energy, waste or the re-modelling of the school yard are all well used 'examples' of issues where participation is fundamental, where simple solutions are not given, and where there is space for uncertainty. This includes

different points of view, and the exercise of democracy for sharing and taking decisions. It is also important that teachers clarify to students the power relationships – social, institutional, economical - without giving them the false impression that they alone will be allowed to make the final decision.

The main aim is to understand how things work in reality in order to be prepared to change them in the future, if required. The outcome can be more or less successful without leaving the students with a feeling of frustration. But when an outcome is reached, and a little dream of change becomes reality because of the joint efforts of the class or the school, it is extraordinarily important to value this change, also for the students who have not participated, and to nurture and maintain the results obtained. In many cases, follow up of the changes obtained is more difficult than the change for itself. This can be a point for reflection of the students and the whole school.

Quality criteria in the area of visible outcomes at school and in the local community

- Physical / technical changes in the school and in the local community, relevant for ESD, are seen as an opportunity for teaching and learning and are used for participation and democratic decision making.
- The changes obtained and the outcomes reached at school and in the local community are nurtured and maintained.
- .....

3. Quality criteria in the area of perspectives for the future

Example

In a primary grade 5 class the teacher wanted to have a concrete way of addressing inter-generational aspects of development issues. She first let her class guess how many grandchildren they might have each. Then she asked them each to choose one of their grandchildren and to make a small model of him or her – she circulated a pre-cut piece of cardboard and some different kinds of coloured paper to be cut for dressing. She then asked them to write down a possible name for their grandchild, what they would guess could be their favourite dishes and what they might enjoy best. All of this is a means to engage the students in the life of their potential grandchildren.

On the wall in the classroom she made a long timeline, indicating the year now, and some decades in the past. She also marked a number of decades to come. After discussing a little with the students what such a timeline could stand for, the class discussed how many years would pass from now, until their grandchildren had the age they had anticipated. And finally all their model-grandchildren were fixed above the timeline in the proper time-span from now.

From that moment the teacher had an easy task to stimulate her students to think of the future relating to concrete problems. By pointing to 'their grandchildren' they could come up with aspects of opportunities or threats generated by the situation today and possible options. Often wishes of present generations could be foreseen as being against the interest of their grandchildren unless these conflicts were taken into account.

Rationale

Development of society is not in the mind of younger students unless they get help to focus on it and to understand the processes of societal development. In some cultures, students are used to focus on their own and peers' development and they see the surrounding society and environment as rather static. In others cultures the uncertainty and lack of stability is such that the students think that it does not make sense to care for the future.

'The future starts every second' and 'our future is influenced by what we and others do', are starting points for looking on issues of development. Another is to look back in time and to find out what shaped the changes we already know and the conditions in which we live up to now.

When looking forward we should not regard 'development' as just one predetermined direction, but emphasize the many options for decisions and alternative solutions and ways of development. Without an understanding of different possible futures, there is no space left for democracy. Democracy builds on the idea that we together shape the future we want. All decisions and changes have implications for the future in the short term and the long term. To try to foresee these and to make up our mind about what are the most desirable implications help students to be actively involved in shaping the future of society and the conditions for their daily life. The acceptance of the impossibility of eliminating risk and uncertainty is part of this understanding, together with the ability of learning from the past, and from the mistakes made.

Quality criteria in the area of perspectives for the future

- Students work with visions and scenarios, seeking alternative ways of development and changes for the future and establishing criteria for choice.
- Students get involved in comparing short term and long term effects of decisions and alternatives.
- Students seek relations between the past, the present and the future, in order to get a historical understanding of the issue concerned.
- Students work with planning as a way to reduce future risks and to accept uncertainty.
- .....



4. Quality Criteria in the area of a 'culture of complexity'

Example

The challenge of complexity was central to the whole life of a small primary school. Not only the school plan but also the school organisation tried to address the complexity of reality. Because it is a primary school the first question teachers asked was, 'What does complexity mean for us?' and 'What does complexity mean for our small children?'

The teachers decided to have as a common strategy for all subjects and all grades to explore links and relations. As a consequence, astronomy and the observation of the sky became a special interest point of the school: Looking at the movement of the sun and the stars the pupils learned about time and space, and they asked themselves about their place on the planet. They learned to wait, and to link their waiting with the emotion of discovery. Teachers believed that children cannot be asked to care for a tree or for the quality of the water if they have not had time to play, to touch and to enjoy physical contact with nature. Children went into the field during all kinds of weather and they prepared themselves for each excursion, trying to be prepared not only for their tasks but also for the 'unexpected', asking themselves 'what do I do if…'. After the excursions they reflected and reported on the emotions, the perceptions, where they met the unexpected and how they dealt with it.

The empathy with nature was explored further through ancient myths and stories, where the children were invited to invent their own 'myth'. The students were also asked to maintain and care for the school garden, reinforcing the 'natural links' they had discovered, to start to care for 'the small scale things and local dimensions in order to learn to take care of the large and distant'.

Rationale

Complexity is becoming one of the keywords of ESD but its meaning and the challenges that it poses to education are still to be explored. The emerging idea is that we do not only have a complex world and that environmental situations are complex to manage, but that we need 'complex thinking' that counteracts the reductionism of many 'narrow technical rationalities'.

Our environmental crisis has been recognized as the outcome of the application to our complex social and natural world of a way of thinking oriented

to 'simple problem-solving' and to 'understanding things by taking them apart'. Education has a main role in building a culture of complexity. There are three main directions explored by schools and by educational researchers that can be applied to all disciplines and school activities in order to build complexity oriented education:

a) The attention to relations, in space and in time, connecting all living beings to each other, the natural events and to the social and economic ones, the individual to the global behaviour, in order to build a 'systemic view' of reality and to encourage the ability to grasp the links between global effects and local actions.
b) The importance of both diversity and constraints as opportunities for the future. Constraints are different from scientific or technical laws, and allow for 'non predictable' evolution and for creativity. Learning in itself is an example of these semi-chaotic, non- predictable processes, where individual diversity and context constraints allow for the construction of personal meanings and solutions.
c) The awareness of limits - to resources, to the time necessary for biological cycles, to the potential of the human mind ... - together with the awareness of the unpredictability of complex natural or social systems and the risk associated with every action or inaction.

Cognition, in these orientations, is not only rational but emotional and values-based, and include empathy, respect for diversity (biological, social, cultural ...), and the awareness of the limits of knowledge itself. Wisdom and precaution in planning action are consequences of this 'complex' point of view: Precaution means being conscious of the limits of our knowledge and if in doubt of the serious consequences of a decision expect the worst and take that into account when pros and contras for alternative solutions are evaluated.

Quality criteria in the area of a 'culture of complexity'

- Students work on constructing their understanding of the problem, looking for different interests and different points of view, before trying to find a solution.
- Teaching in all subjects is based on seeking out relationships, multiple influences and interactions.
- Students have the opportunity to appreciate and confront diversity – biological, social, cultural – and to look at this as 'opportunities' for broadening options for change.
- Students are encouraged to listen to their emotions and to use them as a way to reach deeper understanding of problems and situations.
- Students and teachers accept uncertainty as part of the daily life and prepare themselves "to expect the unexpected and to deal with it", being aware of the importance of the precautionary principle.
- .....

5. Quality criteria in the area of critical thinking and the language of possibility

Example

Students in seventh grade were working on a project dealing with problems and questions related to the use of pesticides. In order for the students to get an insight into this complex question it was the teachers' idea that they became aware of the conflicting interests connected to the issue. Therefore half of the class was asked to take one position and identify and analyse arguments for the use of pesticides while the other part of the class took the opposite position, seeking arguments and stances against the use of pesticides.

They were furthermore asked to search for relevant information which could support their specific position: from reading material (books, newspapers, internet etc.) and from 'informers' in the local community whom they could interview. Finally it was a task for the students to present the position they were advocating in a panel debate in the classroom.

To strengthen the authenticity of the schoolwork, the 'informers' from the local community (a traditional farmer, an organic farmer, a manager from a local supermarket, a representative of a consumer organisation and the chairperson from the local branch of the ramblers' organisation) were invited to be present at the panel debate. Following this teaching sequence, the students were asked to discuss in groups and take a stand on the issues.

In this process, they were not only asked for their stance on the use of pesticides and arguments for it, but also what alternatives and possible actions the students could identify – using arguments from the previous learning processes.

Rationale

Students are exposed to an overwhelming amount of information every day – information which is complex, full of uncertainty and often contradictory, and seldom neutral concerning values or politics. This entails that knowledge is not an objective phenomenon that is the same from all perspectives and at all times.

In order to become active and responsible citizens, the students therefore need to be able to think for themselves, not to take all kinds of information and argumentation for granted, but instead to reflect on and go behind assumptions underlying knowledge claims, opinions and ways of looking at things.

On the other hand, by combining critical thinking with the language of possibility it is emphasised that to be a critical human being does not mean to be negative and sceptical of all and everything in a deterministic way. A critical thinker is not a "no man" but a human being who strives to couple the critical process of reflection and inquiry with an empathetic and optimistic vision of potential, searching for solutions and positive direction. The language of possibility underlines that the critical thinker does not look for limits and restrictions but in a creative and open-minded way searches for and is inspired by ways that have been successful and fruitful for others – in other cultures, in other periods of time, and other situations. Thus, by focusing on not only what may be 'wrong' but also what might be 'right', critical thinking coupled with a language of possibility gives human beings personal and collective capacities that can be transformative and point to new vision of the future, much needed when aiming at sustainable development.

Quality criteria in the area of critical thinking and the language of possibility

- Students work with power relations and conflicting interests e.g. in the local situation, between countries, between present and future generations.
- Students are encouraged to look at things from different perspectives and to develop empathy by identifying themselves with others
- Students are encouraged to give arguments for different positions
- Students are encouraged to look for examples of what is (or was) useful and fruitful in other situations, in order to imagine new possibilities and alternative actions.
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6. Quality criteria in the area of value clarification and development

Example

Working with student values is more difficult for teachers who are strongly committed environmentalists! Being aware of that, a group of teachers had a clarification and construction of values as the focus of their collaborative action research. The challenge, they said, was to 'believe in what you do while at the same time giving the space for others' beliefs". The issue was the presence of a large number of hunters among students' parents, and the question raised by one student about the consistency between the hunters declared value of 'love for nature' and their actions.

The teachers avoided presenting their position at the initial stage but organized multiple contacts with the hunters' association, with the forest protection authority and with a local anti-hunting association. An old hunter was asked to tell stories about what fascinated him about hunting, and the story of the region was explored together with its hunting tradition.

In this process, among the global issues raised was that of biodiversity and its importance for future evolution. Distinctions were made about hunting endangered species and hunting species that are now too abundant for the habitat man had left for them.

Regional, national and international laws were taken into account and discussed. Teachers presented themselves as facilitators of the discussions, helping students in clarifying their positions and in asking questions. They too gave their opinions, but no unanimous position on the hunting issue.

The results and questions presented by the students at the end of the year showed a deep understanding not only of the 'hunting' dilemma but of the changing relationships between man and living beings in different times and in different areas of the world.

Rationale

Values are an important part of the culture of complexity and of the construction of critical thinking. ESD is explicitly founded on values and rationality. Its important message is that if we share the value of having respect for the diversity of human beings, we must practise this value accepting the existence of other values.

Values can neither be simply transmitted nor easily changed. Research shows that short term change of behaviour does not correspond with the growth of long term oriented values. In order to start to negotiate values and construct new ones, the first challenge is to become aware of which values people are building on in their everyday life.

In our societies the 'declared' values are often different from the values embedded in actions because they are mixed with interests of the person concerned. In many cases value based opinions or decisions are presented as facts or necessary conclusions.

The teacher's role in the process of value clarification and development is a difficult one: On the one hand s/he must clarify and render explicit personal values and on the other s/he must respect those of the students.

Quality criteria in the area of value clarification and development

- Students work with the distinction between factual knowledge and value-based opinions, and investigate the values and interests behind them.
- Teachers focus on students' clarification and discussion of their own values, thereby strengthening reflection, mutual respect and understanding of other values.
- Teachers accept the challenge of not imposing their own values and opinions allowing students to hold their own positions.
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7. Quality criteria in the area of the action-based perspective

Example

A class of 10-year-olds was working on the problem "Do we have a sensible choice/use of packaging?" The background for the class project was that some of the students found that recycling of packaging in their daily life was not common. For instance, a group of the youngsters were very concerned that the plastic containers with the liquid used for windscreen washing, sold at service stations, were not recycled.

Before dealing with this specific problem, the teacher wanted to work with the packaging problem in general in order to improve their understanding of the issue. The students investigated the amount and type of packaging in various local shops, they analysed the plastic packaging from a "cradle to grave" point of view, they visited recycling firms in the plastic industry, they made a role play to expose the conflict of interests in the use of packaging, and they constructed a questionnaire to reveal attitudes towards packaging.

On the basis of the knowledge they acquired and the questions that arose from the investigations they wrote to the Packaging Board to enquire about the labelling of packaging, to the town hall administration about waste sorting, and to various producers about the amount of packaging of selected goods.

Having identified different arguments, positions and factual matters related to packaging they turned to the specific problem and decided together with their teacher to write to the petrol company concerned. They explained their analysis and suggested recycling the plastic containers. They received an answer saying that the company thought it was a good idea and that they would seriously consider making moves towards establishing a system on the basis of their enquiry.

Rationale

The action perspective means that the students decide together with their teacher to take action to solve or to counteract the sustainable development problem they are working with, and subsequently reflect on the action process. An action is thus targeted at change: a change in the students' personal lifestyle and/or in the students' local and global living conditions

The rationale for taking action is that valuable learning derives from involving oneself in authentic problem-solving activities. By considering evidence, searching

for relevant information, questioning the validity of sources of information, analysing assumptions, detecting biases, exploring alternatives and presenting own viewpoints and possibilities for action, students become wiser as to what mechanisms, phenomena and barriers are connected with the solving of an environmental problem.

However, besides this more "rational" kind of knowledge there is also meta-knowledge that the students acquire by having been personally involved in solving a real-world problem. During this process they often meet obliging adult persons who take time to listen to them and take them seriously. Through such an approach students can develop confidence in personal and communal action as well as the understanding that it helps to get involved.

Quality criteria in the area of the action perspective

- The students' work on issues and actions are regarded by the teacher for their educational value and not only as a way to solve real problems.
- The students participate in decisions on action to influence the problem, and they are learning from reflecting on their experiences.
- The teaching focus lies on authentic action strategies, on action possibilities and on experience from real actions.
- The students' involvement in action is accompanied by reflections on local and global effects, comparing risks and possibilities of alternative decisions.
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8. Quality criteria in the area of participation

Example

A teacher in eighth grade had worked with student participation for many years because it was her opinion that the notion of participation is a central part of and prerequisite for sustainable development. Since the early grades the students had gradually increased their competencies and skills in taking part and sharing responsibility.

In the beginning the teacher had deliberately tried to create an atmosphere in the class in which the students took part in, say, decisions regarding choice of working methods while decisions connected to choice of issues/themes for the teaching was the teacher's responsibility.

Later on the teacher gave more responsibilities and choices to the students, ending up with students taking part in most of the decisions connected to teaching and learning, including themes for projects, working methods, choices of actions and evaluation.

An important aspect in the teacher's initiatives to enhance student participation was the way rules were established. Rules were established through dialogue and negotiation. The power relations were relatively transparent and clear so that students knew when they had influence and when not.

Rationale

The notion of participation is closely linked to the ideal of democracy. Participation is to take part, to share responsibility and to be involved in joint actions – all matters which help to prepare the students in the basic fabric of social life. However, participation is not a straightforward and 'innate' matter – it depends on students' skills and competencies in the field, alongside conditions like: School culture, teaching climate, the specific teaching issue, and teachers' competencies. Following this, it is a central challenge for the teacher to give space for and improve the students' ability to participate genuinely. To listen and express points of views, to take responsibility and to exert influence are matters that have to be learned..

Seen from a learning point of view participation plays a considerable role because it puts the students at the centre of the learning process and gives them ownership over it, promotes motivation to discuss, find solutions, and to act in a social context. Moreover, student participation is central because the teaching

and learning process deals with and affects their lives and their futures. However, participation does not mean that the students should decide everything about the project. The important point is to make room for the students' opportunity to choose to participate at the highest level of his or her ability but with the teacher as the person responsible for the overall quality of learning that takes place in the allocated time.

Quality criteria in the area of participation

- Teachers' focus on students' capacities needed for meaningful participation and co-operation, e.g. listening, expressing points of view, taking responsibility and showing solidarity.
- Teachers give space for students to take part in the decision making process appropriate to the students' age and capacities.
- Students become experienced in democratic participatory processes.
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9. Quality criteria in the area of subject matter

Example

14-years-old students were working in a project on conflict of interests relating to the utilization of a stream close to their school. By examining how the fish farmer and the anglers made use of the stream, the students posed a number of questions, for example: How does a fish farm work? In what ways does it influence the water quality? What are valuable fish species? Has the angler the legal right to fish where he wants? As an introduction, the students took water samples including fauna and flora and built two identical aquaria. They added a surplus of nutrients to one aquarium and in time the water became unclear and the number of water creatures decreased, giving the students an impression of the effects of the fish farm on water quality in the stream.

To get an insight into how a fish farm functions, the students made scale models of the fish farm from papier-mâché using mathematical calculations. They also discussed technical issues related to the feeding of fish and to enrich the water with oxygen.

For investigating the issue from a societal perspective, the students investigated and analysed the body of laws on 'running' a fish farm and to angling.

The students afterwards interviewed the fish farmer and an angler using the knowledge acquired from previous class work in order to identify and analyse the arguments and opinions of the central stakeholders in the project. The interviews were transcribed on computers, the formulations and spellings were checked by peers and developed into a report.

The teacher's idea was to make use of biological, chemical, geographical, mathematical and social science concepts such as nutrients, metabolism, decomposition, scale, oxidation, permission, interests, conflicts, limits, values etc. The students found that this contributed to a better understanding and enriched the various arguments and conceptions regarding the problem and conflicting interests.

Rationale

The curriculum subjects have much to offer ESD. However, SD-related problems can seldom be addressed purely through a single subject of the curriculum. The criterion for including a given subject area is that it can contribute – together

with other subjects - to responding to questions related to the problem. Natural or social sciences are, for instance, not brought into play for their own sake but models and concepts from them are used as a means to qualify the students' understanding of the complexity of the problem at stake.

The problem is like a territory where subjects can be compared with different kinds of maps (political, climatic, geological etc.), useful for understanding and for planning actions. The maps we need depend on what we want to change. The important point is not to use all possible maps but to be able to use them and to understand the process of simplifying complexity without confusing the map with the territory itself.

Working with problems and issues related to sustainable development involves an approach across the borders of the individual subject area. The emphasis is on strengthening the connections between different subject perspectives in a non-fragmented way.

ESD should also support learning within the traditional subjects by providing examples and perspectives for reactivating and innovating teaching and learning in traditional subjects. Seen from this perspective it is a challenge for schools to explore to what extent it is possible to use ESD as a vehicle to enhance the effect on learning of 'traditional' core subject matters and to strengthen the meaningfulness in the learning situation. The problem-oriented, authentic and interdisciplinary approach when working with SD related problems can widen the often isolated academic and theory-oriented subjects of the curriculum.

Quality criteria in the area of subject matter

- Teachers in ESD focus on problems and issues - the subject matter should be functional and relevant for the students' understanding of the complexity of the issues.
- The theories and concepts from the academic disciplines are utilised to rationalise often naïve and uncritical experiential knowledge.
- Teachers look for ideas and perspectives in ESD to reactivate and innovate teaching and learning in traditional subject matters.
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10. Quality criteria in the area of the school policy and planning

Example

The school principal calls for a meeting for all staff at the school inspired by the new decade for education for sustainable development (DESD). He also invites representatives from parents and a few key persons from the local community. He informs participants before the meeting about what he has received in written form and has collected about DESD from the Internet. In his invitation the school principal signals that this appears interesting, but he is not sure if it is a good idea for the school to engage specifically in ESD.

At the meeting all groups are invited to contribute with pros and cons for a concentrated effort in the field of ESD. No final decisions are taken, but a number of working groups are established to investigate different aspects more in detail for a meeting where the final decisions can be taken. Some main points to investigate include a review to see how much of the school's previous experience from different projects and initiatives could be made useful in this new context. Other points relate to how a special effort in ESD would influence the students' learning in the core subject areas and finally affect their performance in important final examinations. The parents and the different stakeholders in the community are encouraged to express their views and interests.

At the second meeting all working groups report back and their findings are discussed. Finally a general agreement is achieved on initiating work with ESD but all groups also express their uncertainty about the way forward. It is emphasized by many that the next steps should be regarded as exploration and learning and not as easy progress and success. It is agreed to identify a list of quality criteria for the school's work with ESD and to use the present list as the point of departure. A number of additional smaller steps are identified at the meeting to involve all employees.

Rationale

School policy has an external as well as internal and both functions can be supported by a focus on ESD. Externally the focus on ESD can help the school to profit from a clear future-oriented profile. Internally a joint focus on how to make ESD a leading motive for reflection and innovation can help to develop the school into a dynamic 'learning organization'. The very nature of ESD implies an atmosphere of exchange of ideas and reflections based on wishes and visions of

the future. In such a way it can help distract from the daily routines and trivial tasks and empower and engage all stakeholders at the school, if the school management understands this potential. At all schools the principal will have a key role to help release the many resources and energies of people at the school. In the process of planning a joint agreement on where to go is mandatory, and small steps in a good direction are much more sustainable than many changes in too short a time.

In a well functioning school the competence of the school is much more than just the sum of the individual competences. As mentioned in the introduction it makes sense to understand the school's culture as an expression of the school's collective 'memory', i.e. that new experience, reflections, innovations etc. are incorporated in the school culture and change the way people interact, discuss and do things. It is the mandate of the school principal to facilitate such processes, but aim, process and organization should be elaborated as a shared vision involving all stakeholders of the school.

Quality criteria in the area of the school policy and planning

- The school includes a focus on ESD in its mission and annual action plan.
- The school leadership encourages teachers to use future perspectives to plan their long-term ESD work.
- The school allocates appropriate school time for the students' work with SD, as well as for the teachers' reflections and clarifications on ESD issues at the school.
- The school establishes a procedure to respond to teachers' needs for further education relevant for ESD.
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11. Quality criteria in the area of the school climate

Example

A little town school is characterized by the different learning plans offered to the students: project work on issues for a sustainable future is at the centre of every grade and the learning of every class. The teachers believe that 'enjoying the school time' and 'to be prepared for the future' can go together, and that a constructive, non-competitive and challenging atmosphere is the better one for students.

The school leadership tries to have a fair division of roles and responsibilities: Some teachers have the responsibility to coordinate the class project work, others take care of interclass school projects such as exchanges with other schools, the integration in class work of disabled students, or the relationships with the municipality, or the educational authorities.

The parents and the community are informed on an ongoing basis and are very proud of the school activities: A parents and citizen association has been formed to support the school, and the association activities are planned together with the school activities in order to discuss with the parents and interested citizens the same issues that the students will be asked to explore during the year.

Every year is a new challenge, and the first month of school is devoted to the planning of the new year's project work and to the construction of trusting relationships in the school community.

Special care is given to the welcoming of the newcomers - teachers, students, parents, or staff – using mixed age group activities, tutoring between students, and special activities for interested parents.

Every stakeholder is represented in the school council, but the intention of the school is to have a wider debate around the main problems and around the main decisions to take, before arriving at the council decision.

Rationale

A school climate is a concept difficult to define but experienced by every teacher and student. The school climate is created by – and has a strong influence on – the bulk of relationships existing between students, teachers, school staff and leaderships, parents and external community. As such, the climate of the school is experienced differently by different groups (teachers, students etc.) in the school.

Within each of these groups the climate can be experienced very differently too. A strong sense of identity, the pride of belonging, and at the same time the feeling that doubts and criticisms are not only permitted but welcomed, could be main components of a positive school climate for many at the school.

ESD can have a positive influence on the school climate, and participation, critical thinking, value clarification, authentic action and accepting complexity can best be learnt in a school where these are developed as common characteristics of the school work.

For ESD it is also important that all the members of the school community are aware of their mission and their contribution: The staff and the cafeteria personnel are as important as the teachers or the parents to build everyday practices of respect, care for the school resources, trust in the democracy rules and enjoyment of the social and learning environment.

Quality criteria in the area of the school climate

- The school atmosphere is such that every one feels that she/he can contribute with innovative ideas and proposals without fear. The school leadership has a particular role in facilitating this.
- The school is seen as an arena where all the stakeholders exercise democracy and participation, and are involved, at different levels, in the decision-making processes.
- The whole school community, especially parents, are informed of the relevance of ESD for students' general learning and are involved in the school development.
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12. Quality criteria in the area of school management

Example

We visit a rather big school in the province. We are well received by the school principal who proudly shows us around at the school ground. This is really a nice school ground. There are lots of trees, flowering bushes and flowers around the small lawns. Many places have small facilities for students to sit outdoor to work or just to relax. Many of the trees bear wooden labels with their common name and the scientific name. One section has a 'herb garden' with plants for food (spices) and health.

While we are sitting and talking about how all this was established through a special grant as part of a project for school improvement the lunch break starts. A class of students passes by with their lunch containers. A small girl makes a mistake and out drops her portion of rice on the ground. Immediately she runs toward a building and comes back with a broom and a dustpan and cleans the ground. Before the class has disappeared in the lunch building she has run back and retained her position among her classmates. On a remark from us about this event, the school principal answers: "Yes, they have learned what to do!"

On a later question to the school principal about how much the pupils were involved in all the improvements of the school ground, the school principal answered that they helped plant the trees. It turned out that the pupils had only been used as tools for the management of the nice school ground. But the school principal quickly saw the potential in how to involve the pupils much more. "Give me one year!" was the final remark from this 'efficient' school principal.

Rationale

At first glance, quality criteria in the area of school management might refer to a clean and nice school ground, well managed school buildings, mechanisms for saving energy and water and good waste handling. But looking further it depends. It depends on how these 'nice' aspects are helpful for the learners' achievement in being prepared to take aspects of sustainable development into account in their future life. Seen from this perspective, the value of involving students in school management activities must first and foremost be seen and assessed in relation to their educational and learning value - not in relation to what extent the efforts may result in, say, saving energy or reducing the amount of waste at school. This quality criteria area must therefore be seen in close

relationship with the bulk of areas which deal with teaching and learning processes.

At the typical school teaching/learning is separate from the school management. The decisions relating to the management of the school are taken outside the reach of the students. This is despite the fact that the management of the school often has huge impact on the students' life in the school.

Teachers might be struggling to help students to be engaged as responsible participants during their lessons and the management of the school in the field of sustainability issues. But if the school is always managed in a top-down style, then the management will act as a 'hidden curriculum' that acts against what the teachers are trying to achieve. Instead of regarding the students as those to be managed as part of the school management, it might be more helpful – again – to look at ways to improve the genuine ownership and participation of the management of the school in order for management activities to be learning activities.

The areas in which effort can be made are mainly related to sustainable development: From the management of natural resource (water, energy, materials, biodiversity) to minimising the use of chemicals and hazardous substances, from the care for waste disposal to the attention to ensure students' safe transportation, from the care for eating habits to the care of the natural environment around the school and in the school yard. The point of exemplary living is to link the lifestyle routines with respecting each other's wishes and needs and helping everyone to be a real participant in the change. These efforts will have an indirect positive impact on the students who live a part of their life in a context explicitly engaged in sustainability issues.

Quality criteria in the area of school management

- The school makes a regular audit concerning the school's needs in the direction of sustainability, involving students, teachers and staff.
- The school decides every year what are the new challenges and what actions to take for a continuous improvement of the school management
- The school strives to be an example of careful management of resources and evidence of the result obtained are shown to the internal and external community.
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13. Quality criteria in the area of evaluation of ESD initiatives at school level.

Example

After 2 years with many lessons dedicated to ESD, the teachers in a junior high school asked for a reflection on the aims and methodologies of their teaching: The students were considering ESD as another duty with no special interest or personal participation on the issues proposed. The teachers were really eager to understand what had been the obstacles or the mistakes made, and they asked people working in the field of ESD to lead a meeting.

As a first step teachers were asked to think of the future instead of the past. What did they really want to achieve? What were the more important 'long term' aims of their teaching for SD? On the basis of their aims, they started to reflect on the 'how', on the methodologies and contents that can be used to achieve these aims.

In this process they realised that in many ways their teaching of ESD was more a transmission of content than a support to their students to enhance their critical and imaginative thinking. The outcome had been a sense of frustration for the students, who were asked to face problems too big and too distant from their daily life.

The teachers decided to revise their teaching and to look for new approaches. In doing so they agreed on a kind of 'criteria' that should be followed by each teacher for the planning of whatever subject or project or initiative in the school. The criteria were in some sense 'abstract' and they decided to have regular meetings to compare the 'practical example' they will find to describe each criterion.

The first 'example' that came up was about the criterion of 'participation', and the example was about the lack of participation: They have decided the criteria without involving students and parents in the process! With the help of an external partner they planned initiatives to involve also students and parents in the exercise of planning a better school that was 'future oriented' and looking at SD.

The process was a long one but at the end of the year the school had developed a set of criteria describing learning approaches, kind of activities, roles of the school in the community to move in the direction of ESD. The criteria were explicit and written in a kind of 'School Chart for ESD' approved by the School Council. In the chart one criterion for school development was 'to be involved in

research', to collect data related to innovations and development and to discuss the data in mixed groups, where parents, students and staff are represented together with teachers.

Rationale

We have no recipes for SD and thus for ESD. Reflections on actions, self-evaluation and action research are approaches that can help school development in the direction of sustainable development. Reflection and research need time, clear research questions, collection of data, interpretation and debates, taking into account different perspectives. Documentation of the action taken and of the teaching processes is a first step. Other steps need a definition of the quality that the school wants to achieve, and of the quality criteria that might be used for the evaluation of this achievement. The discussion of a set of quality criteria specific for the school, open to the participation of students, parents, staff, external community, is a way to develop a common understanding of the school ESD 'philosophy', and a culture of participation.

Discussion should not stop with the discussion of criteria, but continue with the involvement of all the stakeholders in the interpretation of the data collected and then in the internal evaluation of the results obtained. To shift from short term visible outcomes to medium and long term learning outcomes, concerning also values and critical thinking, and not only behaviour is not an easy process, but can be fostered by the clarification of criteria and by the reflection and evaluation of the actions taken.

Quality criteria in the area of reflection and evaluation on ESD initiatives at school level

- The school allocates appropriate school time for teachers' reflections and research on their ESD issues.
- The school clarifies and develops quality criteria for ESD according to its vision of ESD, and use them for internal evaluation.
- The school establishes procedures to make use of gains and achievements from ESD, as well as of the obstacles encountered, for the benefit of the whole school, even for teachers not involved in ESD initiatives.
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14. Quality criteria in the area of community co-operation

Example

Teachers in a technical secondary school were looking for possibilities of true experiential learning and placements in the local community that could introduce students to the field of ESD. The town where the school is located is situated near a lake. Special attention was given in the last five years to the problem of water pollution.

The school decided to have all the laboratory-scheduled activities (chemistry, micro-biology and physics) focused on the situation of the lake, and proposed a technical partnership to the local Environmental Authority, offering to conduct one part of the analysis and of the water monitoring needed. In addition to this the students used part of their social study and specific project time to investigate other important features of the problem, like the feelings and opinions of the inhabitants about the pollution of the lake and the restrictions and taxes that have been imposed by the municipality.

The year ended with a public presentation of the data collected and of the citizens' proposals for improving not only the quality of the lake but of the rivers as well. After this presentation, other schools – some primary and middle schools and an art school, that have been involved in the designing and realization of the exhibition – wanted to join the action.

The municipality made a contract with the technical school for a 3 years monitoring of the lake water pollution and funded a campaign about looking after the water, organized and carried out by the network of schools, and directed to the town population.

Rationale

One of the main ideas in ESD is to be locally relevant and to construct 'local situational knowledge'. In this way, schools are no more institutions separated from the real world, proposing abstract general knowledge, but become institutions active in the society, recognized as relevant stakeholders in the development of the community.

A first step is to use the features and problems of the community as resources for fieldwork and active learning. A further step is to propose the school as an important voice for the planning of local sustainable development, and another step is to offer the school's facilities and competencies for community studies

and action in the direction of sustainability. In this process the schools become 'core social centres' with open doors, sources of expertise, sharing responsibilities with others community bodies. Teachers and students gain in visibility and recognition, and the latter start practising their future role as active citizens.

Quality criteria in the area of community co-operation

- The school involves the community as a resource for teaching /learning in meaningful ways.
- The school uses the community as an arena for genuine action.
- The school enables the local community to address its concerns to the school and serve as a 'community-centre'.
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15. Quality criteria in the area of networking and partnerships

Example

A municipality wanted to develop their 50 schools into an entire school system in which networking, partnerships and the involvement of an educational university should play a prominent role. Initially, the schools took part in an in-service teacher training programme which educated two teachers from each school to be able to inspire, guide and be critical friends for their colleagues.

Supported by the municipality, this group of critical friends and the university formed a group for facilitating the initial cooperation among the schools.

The schools formed partnerships defined by geographic criteria or in some cases by interest in certain areas within ESD. The partnership was established on both the level of headmasters, teachers and students. One school was especially interested in getting support relating to formulating the school action plan for including ESD in their teaching. Thanks to the network they established cooperation with another school in working on this task in which critical friends functioned as key players in the exchange of information and experiences.

Another group of schools were situated near a wetland area that was to be restored to a lake. They wanted to develop an ESD programme with focus on the conflicting interests related to the restoration. The critical friends together facilitated contact with local key players having interests in and knowledge of the area: landowners, the municipality, preservation organisation etc. These contacts gave rise to a lasting partnership between one of the schools and the preservation organisation.

Rationale

A key aspect of networking and partnerships is regular and systematic development and exchange of experience and information relevant for ESD. Networking and partnership can take place on several levels: Networking between local neighbouring schools, networking between schools and NGOs or GOs active in educational development in the field of ESD (universities, centres or associations with experience in teacher-training) or networking with international partners.

At school level, students as well as teachers are active in the process of creating and maintaining networks and partnerships. Schools gain by networking in both a re-active and pro-active way, i.e. schools develop their teaching and

learning by learning from experiences from other educational institutions and by initiating and promoting networks and partnerships in which they generate and pass on their experiences. Networking will in this perspective be of a dynamic character, qualifying all partners and establishing synergy in the partnership.

It is a challenge for national and regional education authorities to provide economic resources and frames that make it possible for schools to establish and maintain networks and partnerships.

Quality criteria in the area of networking and partnerships

- The school co-operates with other schools in order to develop, exchange and compare ideas and information relevant for ESD.
- The school is part of local, national, or international networks relevant for ESD in which they are encouraging students to take initiatives.
- The school is seeking co-operation with institutions active in educational development in the field of ESD.
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Suggestions for further reading

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Solothurn / Switzerland

University of Zurich, Institute
for Teacher Education /
Switzerland

This publication is essential reading for schools wishing to engage in Education for Sustainable Development (ESD). It demonstrates how a focus on ESD can help a school develop as a better school for pupils, teachers, headmasters and the surrounding community. The publication will help schools new to ESD to get a good grounding, and engage the relevant stakeholders.

For experienced ECO- or ESD-schools the publication will support the school's further development and success. Included is a list of 'quality criteria' to be used as a starting point for debate and innovation regarding ESD among educational authorities, teachers, headmasters, parents, and students.



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