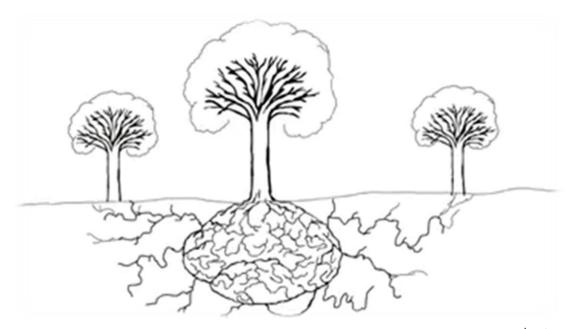
# **Tesis doctoral**

# Textos reflexivos en redes internacionales de Educación para el Desarrollo Sostenible

Análisis del lenguaje evaluativo desde la Teoría de la Valoración



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# PMI RAR, by NC (A3)

# **SUPPORT Partner Meeting 1, Shrewsbury UK January 24-25 2008**

Reflective activity report

by the meeting organiser, Faye Benedict at the SUPPORT secretariat July 21, 2008

This is a confidential reflective evaluation report on the first partner meeting to be part of the internal evaluation of the SUPPORT project and an aid to action learning in the project. It represents solely my views (Faye Benedict, the project coordinator). I will write it as a chronological story integrating in each section the challenges and lessons learned. I have pulled out these elements:

- planning
- choice of venue
- atmosphere and network interactions
- partner presentations
- the work (did we achieve our goals) and
- reflections on the project leadership.

# Planning: Rush-rush!!!

The planning of the partner meeting was the sole responsibility of the SUPPORT secretariat, unlike the ICT meeting in which part of the planning responsibility was delegated/contracted from the SUPPORT project to the FSCEE.

The role of the FSCEE in the partner meeting was limited to providing the venue at the field station in Shrewsbury and some logistical support by the FSCEE staff. The SUPPORT secretariat was responsible for reporting.

until a second administrative person could be recruited.

To put the planning of the meeting into a broader context, the SUPPORT project was officially approved and the EU contract signed and delivered on November 11, 2007. We had gotten signals earlier about the approval, and the first advisory board meeting was held as planned in Vienna in early November. There was therefore considerable time pressure in starting up the project with the ICT meeting at the end of January. The secretariat at the Norwegian University of Life Sciences was not yet established. I was working alone and extra hours, including during the Christmas vacation,

After the project was approved by the EU I took a closer look at the project application and realized that there were some basic "structural" problems with the project plan and -budget. Among other things, there was no partner meeting planned until September 2008, almost a full year into the project! Also, the total number of days of partner meetings planned for all 3 years was only 3. What to do?

At a later meeting in Brussels Astrid Sandås and I learned that it was normal to have 2-3 partner meetings per year, and that these could last up to a week to give time for cultural or recreational activities to really getting to know each other and build the network in a more informal and less pressured setting than short partner meetings.

The main planning challenges therefore became:

- 1) to insert an additional partner meeting into our project plan (if there was room for it in the budget), and
- 2) to make an agenda for the partner meeting that would cover the most essential things for project startup and would also create a good social environment for growing the network in only 1 day!

I raised these issues with the advisory group in November. They agreed that not having a partner meeting at the start was a problem, and asked to try to put an extra day onto the ICT workshop in Shrewsbury for a fourth partner meeting.

An additional uncertainty in the planning phase was that I was new in the role of network coordinator and had to more or less "feel my way" and just use common sense in the startup phase. I consulted Astrid Sandås and the Comenius "survival handbook". I also had a meeting with two colleagues at the Norwegian University of Life Sciences who are partners in another EU networking project (Framework Programme, not Comenius). They advised me to be sure to give the partners time to present themselves, to focus on "getting everybody on the same track" and understanding what the project is about. They also suggested getting the partners to start work to clarify what specifically their would do in the project. Their advice was extremely on-the-mark.

It became clear that there was too much to do for a one day partner meeting - but we needed to try to do it anyway. The agenda for the partner meeting was made, including elements of information, discussion, activity planning and social time. This was important work for project startup, and we needed to make the most of the time together. We decided to take some time from the ICT meeting immediately preceding the partner meeting, for the partners to introduce themselves. This would normally have been part of the partner meeting but doing this right after arriving, at the start of the ICT meeting, was both more logical and would save time at the partner meeting.

As the meeting date approached, my time was consumed by attending SUPPORT events in the UK and Budapest, organising the first advisory group meeting, recruiting staff to the secretariat and planning the ICT meeting. The ICT meeting, especially, took much more planning time than expected (see the reflective report on the ICT meeting for more about that). As a result of all of these factors, the detailed planning of the partner meeting was delayed and ended up being quite rushed and last-minute. But we managed and the partners showed understanding.

All in all, there was considerable suspense about whether we could pull this off, whether we had made an appropriate agenda, and whether the partners would actually feel that they get understood the project and their role in it at the end of the week.

And the stakes were high, as a poor "launch" would not bode well for the project!

## Participant evaluation of planning

The participant evaluations of the planning were positive (scores 3.3-3.6 on a scale from 1-4 for four questions). Information and communication prior to the event was the lowest score and we see that this could be improved.

#### Lesson:

- Sometimes time constraints are very serious and a risk to the project. It is nice when the partners are understanding rather than demanding in these special situations.
- The secretariat should start the planning and send the agenda and other information slightly earlier if possible next time.
- ➤ Despite all these potentially devastating challenges, we are able to plan a meeting that turned out quite well thanks largely to the good will of the partners!

## Choice of venue

Faye Benedict from the secretariat and Gaute Grønstøl from University of Bergen had participated in a Study Visit at the Field Center in December 2007. We were therefore aware that participants would need to spend several hours or even an additional overnight, getting to and from an airport from the Center. After negotiating a price for both the ICT meeting and the partner meeting, we also realized that the cost per day was going to be unreasonably high, but accepted this in light of the work being done by the staff of the FSCEE. This would be a way to support their organisational work, in the ICT meeting. The same daily rate was charged for the last day (partner meeting) even though the FSCEE was only providing the venue and some logistical support on that day.

We were also aware that the standard of the rooms and indoor climate (bedrooms, shared baths, group rooms, shared working space) was somewhat below what one



expects when travelling to a seminar of this kind. There were problems with dampness, mold, plumbing, ventilation of the main meeting room and internet connections. The internet was not available in many spots, and the secretariat finally asked for a list of the places at the station where the wireless internet did work. Even in these spots, the internet would continually shut down due to the strict content filters at the station (which apparently could not be removed temporarily for our group).

Under doubt, we decided to go ahead and use the venue which our partner the FSCEE had offered and which had been planned from the start, under the condition that the internet wireless system was upgraded. The FSCEE did upgrade it somewhat, they said, although this did not solve the main cutting-out problem and most of the center areas still did not have internet access.

Changing the venue at a late date would be both unpleasant and inconvenient. Also, one would not want to be guilty of consumerism or caring about room standards, in a conference

about sustainability! In retrospect, despite all of the advantages of being located at a cosy field station, it might have been a better solution (with more comfortable participants and fewer unnecessary distractions) to choose a small hotel or pension nearer the airport. Others might disagree.

# Participant evaluation of the venue

The participants gave the venue good marks in the written feedback form. However, it must be noted that several of the participants did react and give verbal feedback to the organisers about the standard and state of the rooms and baths. A thorough chlorine scrub of the baths was conducted mid-seminar. While the kitchen workers and student helpers were very helpful and popular, the overbearing site manager/matron (who had also been put unplanned into the agenda at the start of the ICT workshop to promote and tell about the FSCEE) was less popular...

#### Lesson:

➤ Simpler kinds of accommodation can be acceptable in an event like this if everyone is told about the standard ahead of time and the facilities are conducive to the work being done. However, one should check out all facilities ahead of time, especially if a partner has a vested interest in holding the event at their facility. Partner travel time should also be considered. In this case there were redeeming positive experiences: it was good to have the field station to ourselves and to feel that we were at an educational institution rather than a hotel.

# Atmosphere and network interactions

The SUPPORT partners really came to the fore and must be given all of the credit for making the meeting a pleasure and a success in terms of the discussions and interactions - with their untiring engagement, good humor and positive attitudes.

As we entered the partner meeting on Thursday afternoon, everyone was a little tired after the intensive 3 days of work in the ICT workshop. The discussions in the ICT workshop had at times been difficult due to differences of opinion, strong and enthusiastic personalities and role tensions.

A wonderful dancing and music social evening arranged by the hosts on Wednesday night, however, brought everyone together. The minstral event and participatory music-making on Thursday evening was also fun and brought the group together laughing. This is important!!

We had not gotten any physical exercise or nature experience (except the dancing which was a lifesaver and walking around town a bit in Shrewsbury). From an early stage in the planning the secretariat had asked that this be included in the program. Since this was a field station with a lot of outside activities for kids, the secretariat had suggested that we might be shown around by one of the field teachers such as Heather. We also asked that a map of trails in the area around the field station be made available so that people could get out and go for an offroad walk on their own or in groups. Neither the outdoor tour nor the trail maps materialised. The January weather was not very inspiring either, as it was overcast with mud and rain showers almost the whole time. Amazingly, this didn't actually seem to dampen spirits.

The partners garnered their resources and pulled through with good discussions and good work on the last day at Shrewsbury as well – but it could easily have been otherwise. As well as the partners themselves, I am convinced that the inspiration of the two music evenings "saved" the daytime work and network-building aspects of the meeting.

# Participant evaluation of atmosphere and interaction

The participants said in their feedback that they established useful contacts and became aware of the usefulness of international exchange. Many of them wrote in their open comments that they particularly liked the good atmosphere in the group, the international exchange of ideas and the opportunities for networking.

About a quarter of the participants experienced some language/communication difficulties but this does not seem to have seriously impacted their total evaluation of the work and what they got out of the meeting. An inclusive atmosphere would be especially important for these partners.

#### Lessons:

- Always remember that the partner network is made up of people. For the network to function, it is absolutely essential that everyone genuinely enjoys each others' company and feels free to exchange ideas at the events. Everyone's basic human needs for rest, exercise and pleasurable free time must also be fulfilled. Music, dance, nature and laughter are good in an international, multilingual group!
- > Small group work is good for international exchange of ideas in which some partners have language difficulties. An inclusive atmosphere in which everyone's contribution is valued, is essential.

# Partner presentations

The partners were requested to prepare 2 slides about the unique resources and competence their organisation brought to the SUPPORT project.

All of the partners present made their presentation at the start of the ICT meeting. However, most presented the organisation without reflecting much on how their competence related to the SUPPORT project. The presentations, while good, were therefore not as relevant and useful as they might have been, in terms of giving an overview of partner resources and interests in SUPPORT.

The round of presentations was nevertheless very useful (and necessary) in terms of getting the partners talking and feeling a part of the meeting and the partner group. Nobody was anonymous - every participant became visible and had a chance to present themselves. The presentations gave a starting point for contact and network-building among the partners.

#### Lessons:

- Sometimes you have to go through some dry parts for the sake of ownership and listening to everybody.
- People don't always do what you have asked them to do, even if you ask it very clearly.

# The work – did we achieve the goals set out?

When judging the success of the meeting in reaching its goals the views of the participants are probably more important than those of the secretariat, so I will focus on them here. The following average scores were given by 19 participants (on a scale of 1-4) for the results in terms of 6 stated goals of the meeting:

Goal	Score
The meeting gave me a better understanding of the SUPPORT project	3,69
I now have a good understanding of my role in the project	3,48
We reached the goal of defining success criteria for the project	3,2
The action plan for my partner organisation gives a good basis for further work with	3,33
the project	
The event was successful in building a base of understanding and communication	3,51
among the partners	
The event has motivated me to be active in the SUPPORT project	3.54

These scores are very high! They give a clear indication that the first partner meeting can be considered a success. It is especially reassuring from the point of view of the secretariat, that the partners felt that they now understand the project and their role in it, and that the meeting helped them become motivated to participate.

The two weakest points were the action plans and definition of success criteria, but these scores are also nevertheless reassuringly solid. There is no grounds for anxiety on either point. Actually, neither of these two activities were meant to be completed entirely in the framework of the 1-day meeting. Just to have made a strong beginning on them was more than enough. Both the action plans and the success criteria would be further developed later.

All in all I think both the secretariat and the partners can be very pleased that the first partner meeting went off so well in many respects.



➤ Be optimistic! If everyone puts their minds together we can do a good piece of work together and support and inspire each other!

# Some final thoughts/lessons about project leadership

I would like to end with some reflections on the role of the project leadership, especially as this created some issues during the planning of the ICT workshop immediately preceding the partner meeting.

I thought it was evident at the ICT meeting, and even more so in the partner meeting, that the project leadership is there primarily to create opportunities for the partners in the network to

work together and "create" the SUPPORT activities. That is, a facilitative role for the network.

However there is, and should be, also an element of leadership. This means having and communicating the vision regarding goals and how to reach them, as well as having a steering hand in the planning of events together with the organisers, to ensure that they are on the mark and will help the project success. In the case of the Norwegian project leadership, both Astrid at the Directorate of Education and I at the University of Life Sciences do have considerable background on the themes and activities of SUPPORT. Also, the climate campaign is a continuation and elaboration of work with ENSI in Norway and Norwegian experience with ICT-based school-research and school-community collaboration. The leadership role also spills over to quality control, as the beneficiary and coordinating institutions (Norwegian Directorate of Education and Training and Norwegian University of Life Sciences) both feel responsibility for ensuring that the project has high-quality events, publications and results.

This combination of roles (facilitation of the partner network, leadership of the work of the network and quality control) can be problematic but it is also positive. The positive side is that it should improve the quality of the work being done and reduce the many risks in a project of this kind. Negative sides would be if partners feel that somebody other than them has the main responsibility for the work to be done (reduced ownership) or if a partner felt they were being led poorly (for example overruled and steered excessively).

#### Lessons:

It can be a challenge to the project leadership to avoid these pitfalls. There is a need for about an equal mix of strong leadership to keep the project on track, and humble facilitation to help and nourish the partners in their work with SUPPORT.

# TCI RAR, by AC (A4)



22.9.2008

Astrid Sandås Directorate for Education and Training P. Box 2824, Tøyen 0608 OSLO, NORWAY

## SUPPORT Project

# ICT SUPPORTED EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GLOBAL RESPONSIBILITY

This is an internal report within the Support project on the organisation of the Support thematic conference on ICT Supported Education for Sustainable Development and Global Responsibility at Hanasaari Swedish-Finnish Cultural Centre, Espoo, Finland, in September, 1 - 4, 2008.

The report spells out the factors that helped to make the conference a success and takes up issues that may need to be improved in arranging future conferences.

# Planning

Planning started well in advance and clear goals were set by the Support project which helped in focusing the planning efforts. The planning team members at FNBE were experts in their fields and well networked in their respective areas both in Finland and within Europe. This – together with Support and ENSI contacts - helped in selection of speakers and more detailed topics in programming.

## Collaboration and networking

The conference was organized in good collaboration with the Hanasaari Swedish-Finnish cultural centre, Norwegian Directorate for Education and Training and the ENSI/Support project. The partners had mutual interests and that created a genuine win-win situation.

The themes of the conference were high on agenda also politically and so e.g. funds could be raised from a current development initiative from the Ministry of Education and speakers with high profile were interested in making their contribution to the discussions.

#### Budget and funding

The total budget for the conference was appr.  $34\ 000\ \text{€}$ . The participation fees amounted to a sum of  $14\ 000\ \text{€}$ . This meant that additional funding was needed if the participation fee were to stay as low as planned  $(300\ \text{€})$ .

Thus, the conference would not have succeeded without the financial contribution of the Support project, the Norwegian Directorate for Education and Training, the Finnish Ministry of Education Global Education Programme— and the contribution in kind by the Hanasaari Swedish-Finnish Cultural Centre which offered the venue and facilities to our disposal free of charge.

# Recruitment of speakers

The cohort of speakers were gathered using the networks and contacts of the Support project, the Norwegian Directorate for Education and Training, the Hanasaari Cultural Centre and the Finnish National Board of Education. This enabled us to have a selection of different viewpoints to the themes of the conference: political, research-based, educational, scientific, practical, technical, local and global.

# Marketing & numbers of participants

It may have been both the up-to-date themes and the selection of viewpoints that attracted participants to the conference. The organizing partners had already established networks of people interested in the themes of the conference and marketing was efficiently done through these networks. There were altogether 105 delegates attending the conference matching nearly to the number of original goal of 110 attendees.

The summer holidays meant a break in information exchange and marketing which caused some delays in getting information through to interested people.

# Registration and participant info & support

Hanasaari conference centre agreed to handle registrations. The registration form was planned together with the FNBE team. Hanasaari piloted a new registration software and this caused some problems and delays in getting the participant information to FNBE. After the registration time had started we noticed some necessary information missing from the registration form and needed to make up a new questionnaire to registered participants using FNBE tools. This created unnecessary complexity and double work in organization and could have been avoided by using more time in formulating the registration form originally.

Also, we recommend that there is only one organization that handles information exchange to and from the participants because multiple actors may cause confusion and misunderstandings by participants and unnecessary double work for the different organizing partners. Yet, it needs to be said that there were actually no problems that could not be overcome.

The fact that some participants were Support partners (about one third of participants) caused some confusion on who needs to pay and what but all matters were settled and there was always excellent collaboration between the oraganising partners.

The number of participants that did not show up was quite low, considering that some registrations were dealt as "no show" by us to start with -a

drawback of an open web registration form is that it attracts "false" registrations.

Because the summer holidays in Finland and central Europe coincided with the time of payment we needed to extent the duration of the payment time until the conference start. Thanks to the flexibility of Hanasaari centre, some modifications in the numbers of participants could be made quite near the conference opening day.

# Venue and conference practicalities

The venue matched well with the needs of the conference and the conference programme ran smoothly as planned. The minor technical problems with the organization of Satu Hassi's presentation as an online conferencing session were mainly caused by the problems at Brussels' end and not at Hanasaari. And, the incident also showed us an example of the vulnerability of technology which suited the conference theme.

The programme included refreshment breaks, lunches and dinners and the audience appreciated the ample time that was allocated for the informal discussions and networking. The food was excellent.

The Hanasaari centre's staff deserves warmest thanks for collaboration and flexibility in all aspects of organizing the conference – the planning, organizing, housing, technical support and catering. And as a conclusion, that is true as regards all organizations and people that partook in making this conference possible.

Counsellor of Education Lea Houtsonen

# TCII RAR, by NC (A4)

#### Reflective internal evaluation report

"ICT supported education for sustainable development and global responsibility" Thematic conference in the SUPPORT project

## Hanasaari, Finland September 1-4 2008

This is the SUPPORT secretariat's reflective internal evaluation report on the conference "ICT supported education for sustainable development and global responsibility" held at Hanasaari, Finland on September 1-4 2008. The conference was a main event in the EU Comenius Lifelong Learning project "SUPPORT: partnership and participation for a sustainable tomorrow."

Note that the report is written from the viewpoint of the SUPPORT secretariat and supplements the main reflective internal evaluation report written by the on-site conference organisers, the Finnish National Board of Education.

## Background

This conference was planned from the inception of the SUPPORT project as a high-level thematic conference to further understanding of the role of ICT in education for sustainable development and global responsibility.

SUPPORT is concerned with innovation in ESD using ICT as a tool for school collaboration with research, local community and other schools. The conference was therefore an important cornerstone of the SUPPORT project as it would help develop a clear theoretical basis for ICT-based innovations in ESD. In other words, SUPPORT was interested in gaining greater research-based insight into the various ways in which ICT can be used as an effective tool to attain the desired learning goals and outcomes of ESD.

The stated conference goals were to increase cooperation and exchange of best practice in the field of research and teaching of education for sustainable development (ESD) and global responsibility. Two themes in particular were to be examined:

- ICT as a tool to facilitate partnerships for ESD and enable collaboration of students, researchers and local communities for sustainable development (SD)
- Developing responsible global citizenship through use of ICT

It was also stated in the conference announcement that the conference aimed to bring together education policy-makers, researchers, teacher educators, teachers, environmental authorities and other professionals of different fields concerned with ESD and global education (GE) to discuss the above issues.

## Planning and cooperation

Program planning was initiated early by the Finnish Board of Education and the SUPPORT advisory group and -partners were actively involved as discussion partners when developing the themes of the conference and program. Agreements were reached early

about SUPPORT funding for the organisational work and keynote speakers, as well as fees to be paid by the SUPPORT partners.

The organisers FNBE had very high competence and good networks on the conference themes. The choice of venue was also a great advantage as the Hanasaari center has competence and experience in international education and is highly professional in arranging events of this kind. The Hanasaari center was a valuable consultant and contributed financially as well by providing conference rooms free of charge.

FNBE contributed considerably to the effort, both financially and in terms of human resources. Each of the tasks was done in a very timely manner by the Finnish organisers, including not only development of the program but also development of promotion materials and a website, practical arrangements and registration. Planning was begun almost a year in advance of the conference, and the FNBE took the initiative to ensure that steps were taken at the right time. This made it very easy for the SUPPORT secretariat, and we felt that the conference was in excellent hands. The role of the secretariat was therefore mostly as a helper and discussion partner for the organisers, particularly as regards possible keynote speakers and facilitators for the group work, as well as promotion through the SUPPORT partners.

The secretariat agrees entirely with the comments made by the Finnish National Board of Education in its reflective evaluation report regarding practical aspects of planning, registration, and other organisation aspects of the conference. The cooperation between the Board of Education and the SUPPORT secretariat went smoothly and in a good and positive spirit of a shared, exciting task. The secretariat was very satisfied with both the planning done by the Board of Education and our cooperative relationship, which allowed us to work through the inevitable practical issues that arose while organising a moderately large conference of this kind.

The secretariat notes that registration and payment of fees tends to be a confusing point in most SUPPORT events. It is complicated by nature, and it is hard to avoid some confusion. Much is done on an individual basis and some things must get worked out underway. The secretariat is involved as the main clearinghouse or point of information about the eligibility of various kinds of participants for funding. Arrangements may differ for various roles and situations: partners, members, speakers, facilititators, sponsored participants, people staying longer than the funded period, spouses and travelling companions, etc.. However, much of the communication about registration is directly between the organiser and the participants through the registration procedures developed by the organiser. Sometimes a fourth party – the venue hotel or conference center – is also involved, creating an additional opportunity for confusion.

The secretariat is mainly responsible for making and communicating clear decisions on an individual basis as needed, and sending updated lists and responding to enquiries by the organisers and the venue. The secretariat felt that this was done conscientiously in this case. It is of course also important, as the organisers note themselves in their internal evaluation, that the registration procedures themselves are clear from the start. They should distinguish between an expression of interest and a binding registration, room reservations need to be

handled systematically, and modes and amounts of conference fee payment must be clear, as well as deadlines for registration and payment, travel information, etc. A goal for future events is to ensure that registration procedures and funding offers are as clear and unambiguous as possible from the start.

#### Reporting arrangements

A group of 3 reporters were engaged by the FNBE to take care of the conference report, largely funded by the SUPPORT project. The secretariat pointed out that the reporters should not mix the reporter role with that of an evaluator or participant. Their task was to reflect the findings of the conference participants rather than assess the topics themselves and presenting their own thinking and ideas on the topics. This line is not always so simple to draw, however. A good reporter will be well-versed and perhaps even opinionated on the issues based on their own knowledge and understanding of the topic. A creative synthesis was also clearly desirable. The conference report has not yet been submitted, but the secretariat feels confident that a good balance between these roles will be found.

#### Reflection and evaluation

The program included a mix of high level inputs, interactive poster sessions, demonstrations, optional school visit, group work and plenary summaries and discussions. After-hours activities included very enjoyable and high quality cultural events and dinners at Hanasaari

A detailed report of the activities and results is included in the activity report (publicly available) and is thus not included in this confidential reflective report. We will concentrate here on strengths and weaknesses of the event, as perceived by us and based on our own experiences, oral feedback given at the conference, and the written participant evaluations (mean scores are reported in last section of this report).

Note that the response rate in the participant evaluation was lower than it should have been (only about 25%) due to the way in which the forms were distributed and collected at the end of the conference. The results should therefore be interpreted with great caution, and used to obtain a general impression of the level of satisfaction and goals attainment, rather than for making detailed comparisons.

Attendance at the conference (105) was as planned. This was a "perfect" amount of people – large enough to allow a wide mix of kinds of participants and opportunities for exchange of ideas, but not so large as to be disorienting or impersonal. The discussions among the participants were lively and intense and the group mixed thoroughly, both in the sessions and in the informal breaks, evenings, etc.

The participant evaluations show that the overall level of satisfaction at the conference was high, although there were also some frustrations. Quite a few participants felt that although the inputs were of high quality and relevant, the schedule was too packed and there was too little time for discussion, debate and drawing conclusions. Days were very long and people got tired. A break or excursion to town would have freshened people up.

The topic was very challenging as it was at the same time broad (ICT, ESD, pedagogics) and narrow (how specifically can ICT promote the learning objectives of ESD??). The second, more narrow question which was intended to be the core question of the conference, is a quite new and cutting edge issue. It was not easy to find keynote speakers who could illuminate the topic from a research perspective. In the conference it was therefore approached empirically, based on discussion of diverse examples presented. The presentations and discussions had the character of action research. Perhaps a more traditional research-based development of educational theory on the topic was not a realistic goal or expectation at this stage of development of the field.

In any case, participants who responded to the evaluation questionnaire were quite positive (average score >3 on a scale from 1 to 4) as regards both the contents and the attainment of conference goals. Importantly, they also responded that *their own competence on the subject has increased* (3,4 out of a possible 4 points) and that the conference succeeded in *bringing together professionals in ESD and GE* (3,6 pts.).

Other aspects of the conference were evaluated as follows by the participants who filled out the evaluation:

- Conference organisation: positive (3.2-3.6)
- Usefulness of the specific sessions: Some of the keynotes and most of the group sessions were very highly valued, but there was slightly lower satisfaction with a few of the activities. The overall picture is positive.
- The venue was very highly rated
- The impacts of the event on partnership dynamics and motivation for SUPPORT were very positive

Looking at the written comments from the participants, we also take note of the following strengths and weaknesses which can inform future event planning:

# Weaknesses/suggestions:

Too packed with presentations and information, too little time for discussion and to reach conclusions

Daily feedback/summary and reflection would have been good

Excursion to surroundings

Clearer environmental profile for the conference operations

#### Strengths, successes

Positive inspiration

Took home many examples, ideas, practical tools

Bredth of kinds of participants

Good people and friendly atmosphere, conducive to sharing ideas and discussion

Focus on competencies of ESD and GE

Meeting like-minded professionals and discussion

Excellent, comfortable venue

These results give grounds to be well satisfied with the overall results of the conference.

# **Additional materials**

Materials from the conference including the program, list of participants and results are published as a separate report and are therefore not appended here. The scores from the participant evaluation results were as follows.

PARTICIPANT EVALUATION RESULTS	n (out of 105 participants)	Avg. score (on a scale of 1-4, where 4 = agrees fully)
1.The organisation of the ICT Conference		
gave evidence of clear planning	25	3,68
had a realistic a time scale	25	3,52
Allowed enough time to complete the objectives of the seminar	25	3,21
sufficient information and communication previous to the event	25	3,48
2. How useful were each of these sessions?		
Keynote I: Education for Sustainable Development and Global Responsibility by Sharifah Norhaidah Sayed Idros, Professor, University Sains Malaysia, School of Educational Studies, Malaysia	25	3,56
Keynote II: Global Education for Furthering Sustainable Development by <i>Rauni Räsänen</i> , Professor, University of Oulu, Finland	25	3.04
Keynote III: Models of ICT for Global Education: Baltic University Programme and the World Conservation Learning Network by <i>Lars Rydén</i> , Professor, Director Emeritus, The Baltic University Programme, Uppsala University, Sweden	26	3,27
Keynote IV: Can Internet Tools Change Behaviour and Teach Global Responsibility by Catherine Bottrill, Consultant Researcher, Oxford University Center for the Environment, United Kingdom	26	3,08
Keynote V: Reflections on Collaboration between Schools, Authorities and Researchers using ICT by <i>Karl Georg Høyer</i> , Professor, Oslo University College, with introduction by Asrtrid Sandås, Norwegian Directorate for Education and Training	26	3,27
Keynote VI: Collaborative learning in on-line education for sustainability by <i>Patrick Dillon</i> , Professor, University of Exeter, United Kingdom	25	3,40
Case studies: ESD & ICT. Chair: Liisa Lind, Senior Adviser, Finnish National Board of Education	22	2,86
Parallel working sessions (Answer only for the group you participated in):		
Quality Criteria for ICT Tools for ESD	5	4,0
Key Competencies for ESD and GE, the role of ICT	2	3,5
Implementing the SUPPORT School Climate Campaign	8	3,12
Active Partnerships between School, Society and Researchers using ICT	12	3,33
3. The ICT Conference provided	0.4	0.07
appropriate content to achieve the aims/objectives of the event	24	3,37
an appropriate mixture of activities: e.g. ice-breaking activities, information-giving sessions, active participation in workshops by participants etc.	26	2,92
good opportunities to know the hosting country and community	23	3,17
good opportunities to gain a better understanding of ESD	24	3,42
good opportunities to understand better the role of ICT in ESD	26	3,31
4. Did we meet the goals that were set for this conference?		
Increase cooperation and exchange of best practice in the field of research in ESD	26	3,12
Increase cooperation and exchange of best practice in the field of teaching ESD	24	3,17
Bring together professionals of different fields concerned with ESD and global education (GE).	25	3,64
Gain understanding of ICT as a tool to facilitate partnership for ESD and enable collaboration of students, researchers and local communities for sustainable development (SD)	26	3,35
Gain understanding of ICT as a tool to develop responsible global citizenship	26	3,19
Increase my own competence on the topics of the conference	26	3,42
5. The venue		
was suitable for the working process	26	3,81
offered an appropriate quality of overnight accommodation and meals	24	3,87
took special requirements of participants into account	24	3,71
6. Partnership		
I feel at ease communicating in a different language	23	3,52
I became more aware of the usefulness of intercultural exchange during this event	26	3,42
I established useful contacts with other participants through this event	24	3,67
The event motivated me to be active in the SUPPORT project	24	3,67
7. Reference questions		<u> </u>
My institution is involved in ESD	22	3,55
,		
I am professionally involved in ESD	22	3,73

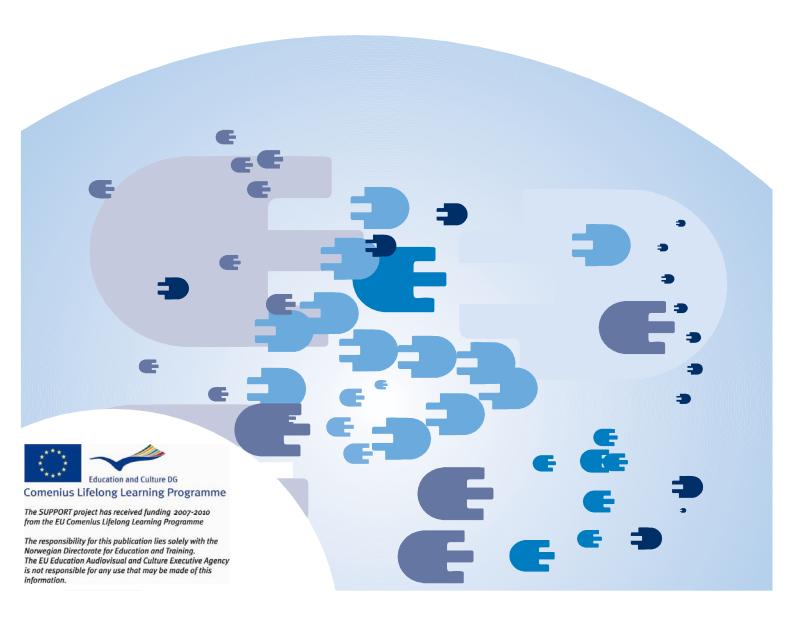
# PMII RAR, by NC (A5)



GRANT AGREEMENT: 2007-3381/001-001

# PARTNER MEETING II REPORT

**SEPTEMBER 4-5, 2008** 



# HANASAARI, FINLAND

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The SUPPORT project has received funding 2007-2010 from the EU Comenius Lifelong Learning Programme.

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# INTRODUCTION

The second partner meeting of the SUPPORT project was held at Hanasaari Swedish-Finnish Cultural Centre in Finland. The meeting was organized in conjunction with the SUPPORT conference "ICT Supported Education for Sustainable Development and Global Responsibility" which took place 1-4 September at Hanasaari. The conference was organized by the SUPPORT partner the Finnish National Board of Education who also helped facilitate the partner meeting. All in cooperation with the Hanasaari Swedish-Finnish Cultural Centre who were very supportive and helpful and let us use the well equipped venue and facilities free of charge.

Most SUPPORT partners and members had participated in the conference before the partner meeting and had already been socializing for the past four days, why the meeting could start right away without much "ice breaking activities". It should however be added that the Finnish hosts had organized social surprise event on the evening of the first meeting day, which included a shaman introducing us in the art of Sauna as well as a quartet and singer from the pop and jazz conservatorium who taught us how to dance Finnish tango. Needless to say, this evening event was a very well received and highly appreciated by all.

# **PROGRAM**

See appendix 1.

# **PARTICIPANTS**

There were 32 participants at the meeting, representing 28 of the organisations in the SUPPORT network. 22 of the partner organisations were represented (including the beneficiary organisations and the project coordinators) and six of the member organisations.

A couple of the Finnish teachers who had been part of the team organizing the ICT-conference were also invited and one of them participated as an observer.

For full participants' list, see appendix 2.

New SUPPORT people attending the meeting were introduced:
Åsa Renman, SUPPORT secretariat (NO)
Steen Forsmann, from Roskilde Technical College (DK)
Dorthe Christensen, Copenhagen University (DK)
Lars Monsen, Lillehammer University College (NO)
Karin Schneeweiss, FORUM – representing the Austrian Institute of Ecology (AT)

<sup>&</sup>lt;sup>1</sup> Partner organizations can receive funding for sending a representative to partner meetings while member organizations are entirely self-funded. In this document, "partners" usually means "partners and members".

# SESSION 1: PREPARATION FOR THE CO2NNECT CAMPAIGN

# Information about the school campaign and CO2nnect website

The goal of the campaign is to have 5000 schools take part in the campaign.

Gaute Grønstøl presented the beta version of the CO<sub>2</sub>nnect-website, going through the website page by page.

He explained the general structure of CO<sub>2</sub>nnect:

- There are 9 steps of action, to guide the teachers through the process
- There are "help sheets" to give some general guidelines, useful tools and examples/ suggestions/ ideas of how to work. One of these help sheets lists examples of questions for discussion.
- With the current set up, teachers will enter the data for the students in their class. There will be four levels of users of the web-site:
  - Participants (schools)
  - Users (teachers)
  - Class
  - Pupil/ student
- A class or school will be able to view their data alone but can also choose to compare it with other schools, nationally or internationally.

Gaute Grønstøl explained that the website is still under construction. Some parts are not yet translated from Norwegian, the texts are drafts and that the structure and links may change - but it nevertheless gives a fair idea of what the campaign site will be like.

Faye Benedict presented briefly the CO<sub>2</sub>nnect evaluation on the website. She explained that it is a draft that can be shortened, and stressed that evaluation is an important part of the learning process for teachers as well as for the SUPPORT project.

The plan is to give all schools who do the campaign a "CO₂nnect school diploma" and all schools who fill out the evaluation a "SUPPORT school diploma".

The ICT-group suggests that about 10 relevant links should to be submitted per country/ language group. "Country profiles", with links to local/ regional organizations, events or information sources can be set up.

The presentations were followed by a discussion session where participants commented on and asked questions about the site, mostly regarding the multipliers and the questionnaire.

The participants were then asked to look at the site in more detail and try it out in groups of 2-5 persons with a laptop. The idea was to get the partners acquainted with the website and to get feedback on the site contents and functionality.

The discussion points and feedback are summarized below.



Gaute, Lea and Marja-Leena discussing the website.

#### General comments on the website

- Several partners felt it was important for schools to be able to choose to view either just their own results or compare with others, in their country or internationally. This point arose several times.
- There was some concern about the work load for teachers if they have to fill out the data for all their

pupils. Many pupils like working on the computer and could probably fill out the data themselves. This would reduce the teacher workload and be a practical exercise contributing to computer skills and learning to read instructions. As computer availability may be limited, it was suggested to keep both options.

 There was some question about whom the site actually is for. Some said it seemed to be created for teachers rather than pupils. Gaute explained that the website is teacher oriented since pupils don't need to log in unless the teacher wants them to. Astrid Sandås explained that in sustain.no, the pupils/ students like the site to feel "real", that it is not a "children's corner", but a more scientific site.

# Help sheets/ Guidelines

- Several participants stressed that the website, including the guidelines, should have few "musts" and many "you-mays". Schools should be given choice, to use the campaign in various ways and to different extents.
- One group requested concrete guidelines and answers to questions that we can foresee will come up
  from teachers are not used to project work or working outside the school yard. They might like more
  concrete tools and examples of project plans. Others rejoined that general ideas and examples of
  activities might be useful, but that that it should be stressed that each teacher should adapt the activities
  to fit their class.

# **Country profiles**

 The participants endorsed the idea of country profiles providing regional specific resources and links. Several specific organisations and websites were mentioned. The participants recommended strongly that the links should take you to documents and sites that are useful to teachers, rather than general portals with large amounts of information.

#### Multipliers

The participants discussed and asked questions about the carbon multipliers at some length. To create as little confusion as possible when making comparisons among countries, the campaign should be based on international, or at least European, standards/ averages to as great an extent as possible.



Erzsebet, Margaret and Sheila scrutinising the website

- Several participants spoke in favour of taking into account the number of passengers in a car to achieve a
  higher level of accuracy. The number of people in a car, the size and age of the car and the type of fuel
  make a big difference for carbon emissions. The participants discussed whether the campaign would give
  enough momentum for change if the results are the same, regardless of whether the parents in the class
  car-pool or drive with only one child per car.
- Gaute Grønstøl explained that they have been using Norwegian multipliers so far, but are looking for a set of international multipliers. He asked for suggestions for a good set of European multipliers. He also explained that it would involve a lot of programming and make the activity considerably more complicated for the pupils, if factors such as the number of passengers were included. A help sheet on calculation of emissions was suggested, to explain and make transparent the assumptions and constants used for the calculations. The sheet should explain that the multipliers don't give 100% accuracy or produce absolutely correct emissions figures for each individual, but that they are good estimates based on scientific measurements and calculations. The results will be accurate enough to make fair comparisons and analyses, and to see trends. We should try to get the best set of multipliers available, and the information on the webpage should be transparent as to where they come from and how they are

calculated. This information can be a very good base for discussions, improve the pupils' understanding of the emissions issue, and contribute to "critical thinking".

- A suggestion was made to provide links to other sites with CO<sub>2</sub>-calculators, to encourage further
  discussions on sources of error and why results may differ. However, this might "distract" form the
  CO<sub>2</sub>nnect activities and it would be difficult to do any kind of quality control as there are many kinds of
  calculators available. This could possibly be included as an analysis/ reflection step. The ICT group will
  look at this question.
- One participant asked if pupils/ students could calculate their own CO<sub>2</sub> data. They would then be able to compare with the figures generated from the campaign and then discuss the differences are and the sources of error. This would increase the level of understanding.
- Legitimacy was stressed as very important, both regarding the multipliers, the emission profiles generated and the "research questions".

#### Questionnaire

The questionnaire is an opinion poll of pupils, and the intention is to provide useful information to climate researchers. The participants discussed the kind of questions that should be asked, the level of difficulty, the number of questions, etc.

- Some thought the questionnaire was too advanced for primary school, for example the questions
  regarding climate policy in the municipality or country. It was explained that the idea is for pupils to do
  some research/investigations to find out and learn about these things. And if they don't, there is always
  the option to answer "don't know". Several people said it was important to clarify the purpose of the
  questionnaire.
- A suggestion was made to add "family transport policies" to the list of questions.
- Some thought that the children's answers to the questionnaire could be very useful when they are discussing transport and climate with local decision makers.
- A response to those who worried about the questions for reflection being too advanced was that
  vocational school is the end of most children's education. After they finish school they might never have
  to think about sustainable development again, so we should try to reach them in this period in their lives.
- The point was made that the campaign is quite different that than classical or traditional campaigns such
  as those of the WWF. We don't want it to be "quick and easy" we want pupils to think and find out things
  they don't know and acquire skills like working together with others. We should be clear that CO<sub>2</sub>
  emissions and transportation are the theme of the campaign, but that the learning goals go further than
  that.
- Each country profile can of course have links to other useful related activities in the country. Synergies
  can be won by working with national partners, but the climate and transport focus of the CO₂nnect
  campaign is different than, for example, campaigns for health education in which pupils are encouraged
  to walk/ bike to school to improve their health.

#### Time line

The goal has been to have the website ready by November and ready to show participants at the Comenius seminar in Athens in November. However, this will depend on several factors such as the feedback and extent of changes and additions requested, availability of a good set of multipliers, etc.

#### Who is behind it?

The partners meant that it was important to make clear who is behind the site, to state the quality and idea behind it. EU-Comenius gives some legitimacy, as well as the number of and sort of partner/ member organizations. Legitimacy of course also comes from the sources for the multipliers as well as the organisations and documents referred to on the website (e.g. learning goals, external links etc).

# Research questions

The ICT group explained the idea of having researchers submit questions, and also explained that engaging collaboration with researchers based on a real interest in the of children can make, can be challenging. So far, the Norwegian Institute for Air Research has submitted a question and any ideas about collaboration with research institutions are welcome.

#### Feedback

Faye Benedict emphasized that all input and feedback on the web site and its contents is very much welcome. The help sheets are available in the partner meeting folder at <a href="www.support-edu.org">www.support-edu.org</a> and on the CO<sub>2</sub>nnect website. The ICT-group asks for as much input as possible. All comments, suggestions etc. are welcome. "It is up to you!"

Gaute Grønstøl stressed that all feedback is valuable, but that there are limits to how much *can* be added to the site, simply because programming and adjustments take time.

One suggestion was well-received, was to let some pupils or students try out the site and give feedback. Gaute Grønstøl said it passwords could be given to some pupils identified by partners/ members in their respective countries. They could then try out the site and send feedback and questions.



Paul, Majda, Karin S. and Sharifah during the group work.

# SESSION 2: PARTNER ACTION PLANS

This session focused on how the partners and members plan to promote and implement CO<sub>2</sub>nnect. This is only a part of each partner's total SUPPORT action plan, which also includes case studies, exchange of experience, participation in SUPPORT events, discussion of results, etc.

Preparing the website and running the two campaign weeks are just small part of the total work with CO<sub>2</sub>nnect. The partners and members will also:

- Work for endorsement/ ensure legitimacy
- Identify interested schools
- Use networks and cooperate with suitable partners
- Promote the campaign and inform schools and other relevant actors
- Support teachers/schools (advice, help them find partner schools, answer questions etc.)
- Research/ follow up

#### **Promotion**

Printed brochures and fliers about CO₂nnect were handed out. Partners are encouraged to use these materials and translate them into their own languages to have something to hand out when meeting potential national partners. They will be put on the website for easy printout. A CO₂nnect poster will also be made and sent to the partners for their use.

When promoting the campaign, the SUPPORT network should stress that CO<sub>2</sub>nnect is different from other "walk to school" campaigns. In particular it is important to point out the multiple learning goals, the methods of engaging pupils in the local community, and role of pupils as supplies of data to the international shared data base on climate emissions from school transport. The secretariat will produce a powerpoint presentation which will be free to use and translate or adapt for promotion work.

The participants commented on the challenge of promoting the campaign before the website before it is opened to the public, and suggested that the website team in Bergen set up a temporary front page on the website to inform interested teachers about the campaign and give relevant information and help to those interested in joining when the website opens.

It may be wise to link up to local or national strategies and actions starting in the promotion stage. In Belgium, for instance, a link can be made to school transport planning work.

The main job for each partner or member organization will be to **promote** CO<sub>2</sub>nnect in schools through media, networks, authorities and organisations with which they have contact. Partners are also encouraged by the ICT group send give continuing feedback on any part of the campaign as it develops – and always the sooner the better! It is difficult to give exact dates for completion of each step as this is an innovative project.

## Group work on CO2nnect promotion plan

Everyone at the meeting was asked to form groups to share ideas on how to promote the campaign. Each partner or member was asked to fill out a simple "promotion action plan" sheet specifying what they planned to do and with whom, to promote the campaign (see Appendix 3). These were later collected.

The importance of promoting the campaign can hardly be overstated. After the lengthy discussion of the website, one of the participants pointed out that we were "still talking about what the website, but all will just be theory unless we manage to mobilize schools to do it".

The participants were very engaged about the contents of the website, and when the group work from the "promotion action plan" session was presented, it was evident that most groups had continued to discussed the campaign and website rather than what they will do to promote the campaign. However, a number of very good promotion ideas and examples did emerge, for example:

- Use the Eco School network (there will be a big meeting in November).
- Use teacher meetings or -conferences as a forum for promotion
- Involve decision makers, as they will be involved in the solutions / projects that come out of the campaign.
- One partner stated that she started promotional work right after the first SUPPORT partner meeting

- in January 2008. The vice chancellor of her university helped her get permission to go into schools to talk to the principals. She will be targeting schools that have been given full ICT/ multimedia access.
- Brochures and flyers will be converted to pdf files and put on the CO<sub>2</sub>nnect website along with a
  powerpoint presentation. Anyone who wants request printed versions to be sent by the secretariat.

The submitted promotion plans can be found in appendix 3.

#### Follow-up:

- Everyone: Give feedback on the web site to the ICT group
- Partners and members in each country: Find about 10 suitable links for the country profiles with links to local/ national organizations, events or information sources
- Everyone: promote CO2nnect in schools and suitable organisations
- Secretariat: produce powerpoint CO<sub>2</sub>nnect presentation
- ICT group: set up a promotion front page for www.co2nnect.org
- Give feedback on the flyers before 15th of September



Esther, Erzsebet, Regina, Attila, Mariona and Christine during group discussions

#### **Translations**

Parts of the website will be translated in addition to the brochures, posters and other promotion materials. The website will probably include quite a lot of text, but the "crucial" pages that teachers need to read should be limited to the equivalent of 15 pages of text. This will also ensure that the amount of text to translate is limited.

Several partners have indicated that they will not be able to translate or finance the translation of the web pages. Additional financing for translations will be made available from the Norwegian Directorate for Education and Training. Those who need support should contact the SUPPORT secretariat who will pass on the requests to Astrid Sandås.

#### Follow-up:

- Translate brochures and posters. Once a brochure or poster is translated it should be sent to the SUPPORT secretariat for layout and uploading.
- Strive to find resources for the translation. If your organisation can not cover the costs and you can't find any grants or other sources then contact the SUPPORT secretariat.

# Optional activities / methods

Several participants brought up ideas for optional activities:

#### Video competition

Partners from several countries were very enthusiastic about using videos as an exciting tool that would engage pupils. It could be a "video Grand Prix" where each country could select their contribution, and the "best" would be invited to show their video at the climate conference in Copenhagen or the SUPPORT conference in the Netherlands. The young people themselves should select the winning video. Other formats such as photos or powerpoint presentations could also be included.

Alternatively, or in addition, a competition could be held for the project work done in connection with the campaign. The prize could be a trip to Copenhagen. Here many kinds of format could be included, including written reports.

Many of the participants underlined the importance of keeping the message and activities simple to avoid confusing or overwhelming schools and pupils. Preferably only one specific activity should be presented to schools at a time. Although the CO<sub>2</sub>nnect campaign can include links to other sites, and the help sheets may suggest various alternative activities that we find suitable, each country and school will have to decide which didactical materials and methods it wishes to use. A video competition and other satellite activities should not be compulsory but rather presented as an additional, optional activities.

# Long term CO<sub>2</sub> emission monitoring

Several partners suggested to add a module allowing school to track their climate emissions over time, or to simulate a reduction in emissions ("what if" pupils were transported in a different way?). This would also be interesting as a basis for discussing alternatives with policy makers and investigating the alternatives. In some cases the distance to school due to the pattern of settlement, rather than choice of transport mode, may be the reason for high climate gas emissions. This reinforces, again, the point that the main objective about the campaign is to learn about and understand the climate- and transportation issue.

Due to the work involved and the short time frame, the SUPPORT leadership indicated that a simulation module was probably beyond the realistic scope of the 2009 campaign and the website. However, it might be integrated into a later tool and pupils could also simulate themselves the various alternatives and the impact of changing their transportation behaviour.

# **SESSION 3: PROJECT BUSINESS**

# Reports from working groups

#### Book on collaboration in ESD

One of the important outputs from the SUPPORT project will be a book of case studies of school collaboration for ESD. The two editors of the book, Katalin Czippán and Attila Varga, gave a progress report on the book and the work with collecting case studies so far.

#### Case studies for the book

The SUPPORT partners and members have submitted diverse case studies on very interesting topics. The editors gave a brief presentation of the findings so far and explained that the cases give some very interesting findings in terms of some emerging themes.

The cases studies include how pupils reconstruct their schools to use less energy, safe transport, gender equity, action research in environmental education and intergenerational theatre. The cases include all sorts of schools from primary to upper secondary, from small village to big city. They include eco schools, ESD demonstration schools as well as elite schools in math and science. This means that one has to be careful with making comparisons – but nevertheless, there is a lot of interesting data that can be extracted.

The editors are very interested in receiving more case studies, even if they don't fit exactly with the given framework. The editors will also contact those who have submitted cases for follow-up questions during the autumn. From now on, they will follow up the submitted cases on a one to one basis – but no more sheets to fill out. They will also request a phone number for each school in the case studies, so that they can contact them directly with follow up questions.

The editors wish to put all cases on the internal SUPPORT website for everyone to study and discuss, and to suggest ideas or questions for further study.

#### Plans for completion of the book

This round of case submissions has a deadline 15<sup>th</sup> of December. Some cases may also be included after the CO₂nnect campaign. It would be interesting and would show activity catalyzed by SUPPORT.

The editors will identify authors for various chapters by Dec 30<sup>th</sup>. Draft chapters will be written in 2009 in communication with SUPPORT partners and members. The draft chapters will be discussed and the book will be finalized for release at the Bergen event in April 2010.

## Young Reporters

Ernest van Hezik explained how making videos could be part of the CO<sub>2</sub>nnect activities. He also referred to the project websites of Codename Future for guides on how to integrate the "triple-P" approach of teaching/learning in the schools and on more specific topics such as how to get officials involved.

# Teacher training and ESD

Lars Monsen, from the SUPPORT partner Lillehammer University College, has taken the initiative to form a group of partners interested in teacher training. The group would look more closely at ESD in teacher training and teacher training policy, depending on the interests of the group members.

One idea suggested by Monsen is a survey of the way teachers in training are prepared in the area of ESD in their teacher training throughout Europe. .

Several of the participants at the partner meeting were interested in joining this group. Lars asked those interested to contact him after the partner meeting.

Christine Affolter indicated that ENSI would be interested in participating as they have tried to raise this issue before and will include it in their next meeting also. Sheila Benell also said that there was a lot of activity in this field in Wales at the moment and she would also be interested to join.

#### Evaluation activities

The internal evaluation plan is on the webpage. Mariona Espinet Blanch, the internal evaluator, asks all partners/ members for feedback on it. The external evaluation plan has also been accepted by the advisory group.

Every partner taking responsibility for organising a SUPPORT event will be asked to include a participant feedback/evaluation and to write a short reflective internal evaluation report. The evaluation is to improve the workings of the network and is part of the overall project monitoring. The evaluators thanked the organizers of activities who have written reflective reports. For more information or help, contact internal evaluator Mariona Espinet Blanch.

# Information about upcoming events

Those responsible for coordinating or organising upcoming events were given the floor to give information. Please refer to <a href="www.support-edu.org">www.support-edu.org</a> for updated information as the events approach, and for reports following the events.

#### Study Visit Austria Oct 20-25, 2008.

"Bridging the gap between research and science education" FORM-IT

The event is organised by the FORM-IT project and highlights one of the themes of SUPPORT close cooperation between research and schools. The event is a listed training event for educational specialists and policy makers.

# Comenius contact seminar in Athens, 25-29 Nov, 2008 "Partnerships at the root of sustainable schools" (Maria Daskolia)

The seminar is being organized by the University of Athens, with support by the Greek national agency. As this seminar is not officially listed as a Comenius contact seminar as it is not being organised directly by the Greek national agency, the national agencies of some of the SUPPORT partners have indicated that funding is not available. Other national agencies have provided funding due to the close cooperation with the Greek national agency and the role they are playing. Formal letters have been sent encouraging the national agencies to provide funding, by both the Greek National Agency and the Norwegian Directorate for Education and Training. Partners were encouraged to recruit for the contact seminar, and to contact their national agency directly and explain the role of the contact seminar in the SUPPORT project.

# Teacher training seminar, Kassel, Germany, April 2009 "ESD in early in-service teacher training" (Reiner Mathar)

The seminar will be held in conjunction with a large conference for school policy makers. Application forms will be made available later.

# Thematic workshop, Partner Meeting and Advisory Group meeting Balearic Islands May 2009 "Collaboration between teachers and local authorities" (Ruben Comas)

In the SUPPORT proposal this event was planned as a thematic workshop. However, due to late planning by the partner and a difficult funding situation for potential participants, and in response to feedback from the partners, the SUPPORT leadership decided to convert this event to a much-needed additional partner meeting. focusing on analysing the experiences of the CO2nnect campaign, the book well underway, p planning of the final conference and dissemination and exploitation of the SUPPORT results. May 9-15<sup>th</sup> is the world environmental education congress in Canada so June would be a suitable time for the partner meeting. Reiner Mathar has offered to organise the partner meeting in Frankfurt.

# Thematic workshop/ Comenius training Hessen Germany 24-27 Sept. 2009 "Working with biodiversity in ESD – reflection on school-research cooperation" (Karin Ulbrich)

This thematic workshop is listed as a teacher training event in the Comenius-Gruntvig database, with reference number **DE-2009-840-001**. This means that eligible participants can apply to their national agencies for funding to attend. The flyer is on the SUPPORT website. SUPPORT also has financing for one representative from each partner organisation to attend. The SUPPORT partners are requested to promote this workshop and recruit schools to attend who are working with biodiversity and school-research collaboration.

#### Study visit Veszprém Hungary

# "Education for sustainability in traditional as well as modern society in central Europe" (Katalin Czippan)

The Study Visit will take place in autumn, 2009. The application to have the study visit listed as a Comenius event is underway and EU funding is expected to be available to attend. See the SUPPORT website for updates. The focus will be on planning for sustainable communities with an emphasis on participation, culture and the role of the school. The target group is policy makers (administrators, rectors, teacher trainers) in education.

# Possible Comenius contact seminar or teacher training, Norway fall 2009 "Teacher competencies for ESD" (Lars Monsen)

This event is still in the "idea" phase and would possibly be a teacher training event on the topic of teacher training for ESD to be held in Norway fall 2009.

# Thematic conference Nov. 2009, s'Hertogenbosch, the Netherlands "Future workers: youngsters in the drivers' seat for Triple P" (Ernest van Hezik)

Planning is underway for this thematic conference with a focus on the pupils as workers for sustainability solutions, to be held at s'Hertogenbosch in Holland.

Ernest van Hezik told about the idea of the conference, focusing on a large number of pupils to be invited. Pupils will also be involved in the planning and there is good cooperation with the regional authorities in Noord Brabant. Costs will be held at a minimum for participants. It is unclear at this point whether EU funding will be available for participants. A conference website will be created.

SUPPORT will provide funding for one representative of each partner organisation to attend the conference and a partner meeting immediately before or after the conference.

This is an exchange of experience event, meaning that the methods of "Triple P" and Young Reporters will be presented for discussion and comparison with other actions or approaches to participation for local sustainable development.

The participants at the Athens Comenius contact seminar will be encouraged to include this conference and the ideas of collaboration for local sustainable development and Triple P in their applications and plans.

Ernest also offered for Codename Future to come to a country and give a workshop on how to use video making and photography as learning tools.

# Third Partner Meeting, s'Hertogenbosch, Holland, Nov 2009.

In connection with the above event. See the SUPPORT webpage for updates.

#### Thematic conference, Bergen, Norway, April 2010

"Continuing the decade - lifelong learning". (Astrid Sandås)

The goal of the conference is to synthesize the state of the art regarding the school system as a learning organisation for ESD. Interactive methods will be used to encourage a true interactive discussion and distillation of knowledge and recommendations.

The organisers in Norway are also considering whether it might be possible to offer a New teacher training course "School organizational development for ESD" immediately before and overlapping the conference.

#### Final partner meeting Sept. 2010, Belgium (Paul Wyckmans)

This will be the final partner meeting, to be held in mid-September 2010, in Belgium. Partners suggested that 4 days be allocated for the work if possible.

#### Other events (outside of SUPPORT):

- ENSI, 26-28 March 2009, Leeuven, Belgium.
- CIRIUS, energy and climate, 23-26 Oct, 2008, Denmark (information was distributed in the handouts)
- Bonn midterm UNESCO ESD decade conference (information was distributed in the handouts)
- Bordeaux preparatory meeting for Bonn (information was distributed in the handouts)
- ECO-schools (Nov)

- Copenhagen climate convention conference, November 2009
- Study visit seminar in the UK
- UK activities in connection with the Darwin anniversary. James Hindson will send information

#### Information from the secretariat

## Presentation of the SUPPORT webpage

The website, its pages and tools, were presented.

All but six of the partners present had registered before the partner meeting, and the secretariat and website administrators emphasized that everyone needed to register.

The partners gave the following feedback, questions and comments on the website to the University of Bergen team who created the website and the SUPPORT secretariat who adds the text contents.

- The document archive is not very user friendly
- There is a function for partners to publish their own news items, but it is not very user friendly, and hard to remember the terms and steps as many partners will not be doing this often. Why is "news" for instance called "Story"?
- Perhaps "news from partners" should be shown on the front page if we want everyone to be active contributors
- The "Forum" function for debate is not very easy to use or attractive. The activity there is not very visible, Sometimes it says "can't post comments", and the topics are preset. If we want to have a website with active debates and sharing of ideas and information, we have to choose a format/ program which allows this. Perhaps better to link to a yahoo-group?
- The same is true of the picture gallery. What about a yahoo group or other tool instead?
- The user list in a not user-friendly format. Requests were made to Bergen a real address list and email functionality, generated from the entered information.
- If the partners are to use regular email instead of the website email function, we need a good common address list. The calendar and list of events should be updated more frequently. The layout of the list of events could be better.
- Entering text is problematic. When using "paste from word" there are still problems with the final view.

Several of the partners reacted to the "double work" of registering both public ("partner/member profile") and internal ("my account") contact information. The secretariat explained that his was necessary to safeguard private information, and offered to help those who had problems. One suggestion was links from the partner name to the partner organizations' homepages. Reporting to the EU

In spring 2009, partners will be requested to make a midterm report of their activities including meetings, case studies, promotions etc. The midterm report to the EU is due at the end of March.

It was suggested that partners keep a log-book indicating hours or days of work and the tasks done, to enable easy reporting.

#### Miscellaneous

Reiner Mathar distributed a CO<sub>2</sub> game and asked everyone to read it and send him comments after the meeting.

James Hindson said that he has started a forum about travelling to the meetings by other modes than air, and investigating the environmental impact of our meetings.

Astrid Sandås informed that it is fine to take a train, even if it is more expensive than air travel, in terms of getting reimbursed.

# **SESSION 4: EVALUATION**

A participant evaluation was carried out using the evaluation form in Appendix 4 which also shows the number of respondents and a summary of the results.

The atmosphere at the meeting was very positive and optimistic, despite a common sense of having too little time to discuss through all of the issues and for the partners to have time to get to know each other better. 26 out of the 32 participants handed in the written evaluation. Participants were asked to give scores from 1 (poorest) to 4 (highest score) on 28 questions covering the organisation of the partner meeting, the venue, the partnership so far, how useful the sessions of the meeting were and if the partner meeting "delivered" according to the goals. There were also 4 open ended questions plus the possibility to give other comments at the end.

The results of the quantitative questions are given in Appendix 4 as average scores. The written replies are not included here due to the need to retain confidentiality. However, both the quantitative and qualitative feedback and their implications for the network cooperation and organisation of coming events, are discussed and reflected upon more thoroughly in the internal evaluation report submitted by the secretariat to the project leadership.

The results can be briefly summarized as follows.

The partners felt that not enough time was allocated to complete the objectives of the partner meeting. This problem stems from the original project proposal. The SUPPORT leadership has inserted 1 new partner meeting and will convert a 2009 seminar to a second new partner meeting, specifically to try to correct this planning error. Also, the 1-day time frame for partner meetings set in the project proposal is very short so the reactions of the partners are not unexpected. We did, however, accomplish a lot in the time available!

Again, due to the shortness of time, some points on the agenda fell out or were dealt with very quickly, with correspondingly lower marks on the evaluation. This applies to the partner action plan revision (where we decided to narrow the focus and only work with the part of the action plan dealing with the CO<sub>2</sub>nnect campaign) and the discussion and evaluation of progress on SUPPORT as a whole.

The participants also gave relatively low marks regarding the extent to which the 1-day partner meeting gave good opportunities to gain a better understanding of ESD and the role of ICT in ESD. However, this feedback is not worrisome since these questions were not appropriate to ask. Greater understanding of ESD and ICT in ESD were not actually goals for the partner meeting, but rather they were goals for the preceding ICT conference. It would also be unrealistic for this expert group to get such opportunities in the context of a 1-day partner meeting.

The participants were quite positive (average score >3) about all of the other items on the questionnaire. High scores (>3,4) were given for the planning of the meeting, the mixture of activities, impact on the participant's motivation to be active in SUPPORT, and all 3 questions relating to the choice of venue.

The written comments indicated that the partners appreciated the lively and constructive discussion atmosphere among the partners, but were somewhat irritated that there was insufficient time to get better acquainted and discuss issues even more thoroughly. The meeting seems to have been quite effective, however, in giving the partners information and motivating for the SUPPORT work, in the planning and discussion of the upcoming CO<sub>2</sub>nnect campaign and websites, and in giving opportunities for networking.

#### **APPENDICES**

#### Appendix 1

# SUPPORT Partner meeting 2 Agenda Helsinki September 4-5 2008

#### GOALS of the partner meeting:

- Prepare for the CO<sub>2</sub>nnect campaign by examining and discussing the pilot CO<sub>2</sub>nnect website and exchanging ideas about how to promote and carry out the CO<sub>2</sub>nnect campaign
- Review partner activities to date and revise and update partner action plans
- · Inform partners about upcoming events and report on ongoing work
- Inform partners about project management including the project master plan, functions of the SUPPORT website and reporting to EU
- · Evaluate the event and reflect on work in SUPPORT so far

#### **AGENDA**

#### Thursday September 4 14:00-17:30

#### SESSION 1: Preparation for the CO2nnect campaign with the ICT group

Gaute Grønstøl will present the features of the CO2nnect Beta version. Discuss registration, guidelines, etwinning, reflection questions, translations, evaluation module, ICT guidelines work, publication of results, etc.

Hands-on practice using the website and discussion/ feedback about the site.

Reiner Mathar will lead an open discussion of how the partners will promote and implement the campaign. Side-events of the campaign could help to promote the campaign, such as: to school by feet, walking bus, image campaign for public transport for teenagers and children. Presentation of the Cool Down game, a possible common action across countries.

#### SESSION 2: Partner action plans

The partners will work in groups to review their activities to date and revise and update the partner action plans.

NOTE: We will focus on specifying how each partner plans to promote and implement the ESD school campaign on transport and climate.

#### Dinner and social evening

#### Friday September 5 09:00-13:00

(Begin with summing up from yesterday)

#### SESSION 3: Project business

#### 1) Reports from working groups

- Book on collaboration in ESD. Katalin Czippan and Attila Varga
- ESD in pre-service teacher training sub-project, Lars Monsen
- · Young Reporters, Ernest van Hezik
- · Evaluation activities, Mariona Espinet and Michela Mayer

#### 2) Information about upcoming events

- Study Visit Austria Oct. 20-25 2008 "Bridging the gap between research and science education"
- Comenius contact seminar Athens Nov. 2008 "Partnerships at the root of sustainable schools" (Maria Daskolia)
- Comenius contact seminar (In-service teacher training?) Kassel Germany April 2009 "ESD in early in-service teacher training" (Reiner Mathar)
- Thematic workshop, Partner Meeting and Advisory Group meeting Balearic Islands May 2009
   "Collaboration between teachers and local authorities" (Ruben Comas)
- Thematic workshop/ Comenius training Hessen Germany 24-27 Sept. 2009 "Working with biodiversity in ESD reflection on school-research cooperation" (Karin Ulbrich)
- Study visit Veszprém Hungary "Education for sustainability in traditional as well as modern society in central Europe" (Katalin Czippan)
- Possible Comenius contact seminar or teacher training, Norway fall 2009 "Teacher competencies for ESD" (Lars Monsen)
- Thematic conference Nov. 2009 Netherlands "Future workers: youngsters in the drivers' seat for Triple P' (Ernest van Hezik) and partner meeting
- Thematic conference "Continuing the decade lifelong learning" in Bergen, Norway April 2010.
   New suggestion: teacher training course "School organisational development for ESD" immediately before the conference (Astrid Sandås)
- Final partner meeting Sept. 2010, Belgium (Paul Wyckmans)

#### 3) Information from the secretariat

- Project webpage and how to use it
- SUPPORT promotional materials
- SUPPORT annual report and midterm report to the EU

#### SESSION 4: Evaluation and closing of the meeting

- · Discussion/ reflection on progress so far in SUPPORT
- Internal evaluation of the partner meeting

#### Lunch at Hanasaari

#### Departure

Appendix 2
Participants SUPPORT partner meeting, Hanasaari , Finland, 4-5 Sep 2008

Last name	First name	Organisation	Country	Role
Steiner	Regina	FORUM Umweltbildung	Austria	Partner
Schneeweiss	Karin	FORUM Umweltbildung /Austrian Insitute of Ecology	Austria	Partner
Wyckmans	Paul	VSKO (Secretariat of the Flemish Catholic Education)	Belgium	Partner
Christensen	Dorthe	Faculty of Life Sciences, University of Copenhagen Denmark		Member
Forsmann	Steen	Roskilde Technical College	Denmark	Member
Houtsonen	Lea	Finnish National Board of Education	Finland	Partner
Loukola	Marja- Leena	Finnish National Board of Education	Finland	Partner
Aineslahti	Mervi	Sorrila School, Finland	Finland	Invited observer
Ulbrich	Karin	Helmholtz Centre for Environmental Research	Germany	Partner
Mathar	Reiner	State authority of teacher education	Germany	Partner
Daskolia	Maria	University of Athens	Greece	Partner
Varga	Attila	Hungarian Institute for Education	Hungary	Partner
Horvath	Ferenc	Institute of Ecology and Botany of the Hungarian Academy of Sciences	Hungary	Partner
Idros	Sharifah	University of Sains Malaysia	Malaysia	Member
van Hezik	Ernest	Codename Future	Netherlands	Partner
Monsen	Lars	Lillehammer University College	Norway	Partner
Ugland Andresen	Mari	Norwegian Centre for Science Education	Norway	Member
Sandås	Astrid	Norwegian Directorate for Education and Training	Norway	Partner (benef. org.)
Benedict	Faye	Norwegian University of Life Sciences (SUPPORT secretariat)	Norway	Partner (coord. org.)
Renman	Åsa	Norwegian University of Life Sciences (SUPPORT secretariat)	Norway	Partner (coord. org.)
Høyer	Karl Georg	Oslo University College	Norway	Associated member
Grønstøl	Gaute	University of Bergen, Center of Schools' Science Education	Norway	Partner
Toth	Maria	Healthy Environment Regional Organisation, HERO	Romania	Partner
Hajdu	Erzsebet	Licee Pedagogique Mihai Eminescu	Romania	Partner
Naji	Majda	The National Education Institute	Slovenia	Partner
Espinet	Mariona	Autonomous University of Barcelona	Spain	Partner
Sabio	Esther	Autonomous University of Barcelona	Spain	Partner
Widén	Anna	Keep Sweden Tidy Foundation	Sweden	Partner
Affolter	Christine	Stiftung Umweltbildung Schweiz	Switzerland	Member
Bennell	Sheila	Bangor University	UK	Partner
Hindson	James	Field Studies Council	UK	Partner
Fleming	Margaret	MF Associates	UK	Partner

#### Appendix 3

Sheet for Group Work on how to promote CO<sub>2</sub>nnect.



# Brief plan for how my organization will promote

# CO<sub>2</sub>nnect – CO<sub>2</sub> on the way to school An international school ESD campaign on transport and climate

My name:
My organization:
Country:
Below, list whom you will work with/ towards and how you will do it/ what methods you will use.
1. Who
How
2. Who
How
3. Who
How
4. Who
How
5. Who
How
My organization would be interested in the following types of promotion material:

## Submitted $CO_2$ nnect promotion plans :

name	Regina Steiner	Karin Schneeweiss	Paul Wyckmans
organisation		FORUM umweltbildung	VSKO-Catholic Education
country	Austria	Austria	Belgium
1. Who?	Maria H. Climate -mail	Eco schools	Umbrella VSKO and VSKO and VKBaO (Primary)
1. How?	look how to get in touch	Send and e-mail newsletter to al eco-schools in Austria (about 250)	Steering committee, PPT, flyers
2. Who?	Günther Pfaffenwimmer	Organisations	Catholic schools (ALL) web info, All other schools vsv
2. How?	Find out how to integrate the work in my work plan	informing other organisations of this campaign and ask them to send it to their engaged school networks	web info, brochures
3. Who?	ÖKOLOG	Website umweltbildung.at - field of mobility	Advisors, traffic education starting educators and counsellors
3. How?	promote via the newsletter	put logo and info on the site, and link	coaches NME, PPT flyers, presentation of website, personal contacts
4. Who?	FORUM umweltbildung e- mail list	Ministry of Education	Involved organisations ESD platform, Environmental org.
4. How?	launch news in the newsletter and write article in brochure	Contact the ministry (Günther Pfaffenwimmer) to send out the information to all schools in Austria	PPT, flyers, presentation of site
5. Who?	IMST schools (informatics, maths and Science teacher networks)	Schulisches Mobilitätsmanagement	Involved organisations in traffic and mobility
5. How?	launch in newsletter	information to schools who are participating in that program	PPT + presentation of site

name	Dorthe Christensen	Steen Forsmann	Reiner Mathar
organisation		Roskilde Technical School	school authority of the State
	Copenhagen		of Hessen
country	Denmark	Denmark	Germany
1. Who?	www.dnt.dk	emu.dk	Verkehrsclub Deutschland
			(traffic association)
1. How?		profile the co2nnect on the	Direct contact, trying to become
		teacher's public web portal	a partner, using their material
2. Who?	www.emu.dk	www.klimaundervisning.dk	European Business School
			traffic dep.
2. How?	target their theme	contacting DNF for posting on the	Direct contact, trying to make a
	groups and	portal	common project
	consultants		
3. Who?	www.ku.dk	Gymnasium consultants and	ADFC, bicycle club of Germany
		students	
3. How?		Contacting them through students'	using their projects, email
		organisations	contacts
4. Who?			Nature friends (youth club)
4. How?			Setting up an image campaign
			on public transport
5. Who?			Inwent: chat of the world
5. How?			using the data basis of school

name	Karin Ulbrich	Maria Daskolia	Katalin Czippán
organisation	Helmholtz Centre for Environmental research	University of Athens	HSEE
country	Germany	Greece	Hungary
1. Who?	LISA: Teacher Education Institute S-A	Ministry of Education	Ministry of Env, Head of Dep (20th of Sep)
1. How?	Teacher qualification course	Contact - present the goals/means to be used of the campaign and ask to disseminate and promote it.	Personal phone and e-mail + formal application (send out a letter)
2. Who?	Secondary High school, Halle	Environmental Educators Union/society	Ministry of Edu - Head of main dep. 20 sep
2. How?	Discussion	Disseminate information about the initiative. Ask their members to participate in it.	Personal phone + e-mail + formal application
3. Who?	Association for Nature Conservation Germany (BUND)	University of Athens / Centre for EE	All the Hungarian partners (3)
3. How?	Newsletter	Use of webpage to publicise the event	A meeting, what to do, how, share resp. (30 Sep)
4. Who?	other orgs (NABU, ANU)	NGOs (WWW Hellas, Mediterranean SOS, Eco-schools network)	members of HSEE (800 teachers)
4. How?	mailing lists,	Promote the whole initiative to their members and make it known through their web pages.	newsletter, annual meeting
5. Who?			other environmental organisations, especially energy club
5. How?			mailing list
6. Who?			Eco-schools
6. How?			Newsletter

name	Attila Varga	Ferenc Horvath	Sharifah Idros
organisation	Hungarian Inst. For Educational research and Development	institute of Ecology and Botany	University Sains Malaysia
country	Hungary	Hungary	Malaysia
1. Who?	Ministers	Other Hungarian partners	12 faculty members from USM to help coordinate campaign all over Malaysia. To generate as much case studies as possible.
1. How?	inform and ask for support in promotion	Meeting on what to do, share tasks	They are currently part of my research team. SUPPORT PPT-slides in a 1/2 day workshop.
2. Who?	ECO-school network	Leader of "Berkenyehaz" visitor Centre	Ministry of Education, Malaysia, to gain permission to get cooperation of schools and teachers. (Done!)
2. How?	Via e-newsletters and meetings	Provide her with CO2nnect materials and discuss how to involve in the program of the visitor centre	Vice chancellor of USM had written formal request to DG of MoE to get endorsement. (Done!)
3. Who?	ICT experts and organisations		Educational Technology Division of Min. of Education
3. How?	Ask them to promote CO2nnect as a good practice of ICT		To request participation of existing "smart schools" with ICT-equipment in Malaysia in the ICT campaign an make it part of their school time activities (in the process of making clarification). Letter and ppt.
4. Who?	Pedagogical media, electronically also		State Education Departments
4. How?	Advertisements		Co2nnect pamphlets & other materials (letter and personal visits)
5. Who?	Critical mass		School teachers directly involved
5. How?			information from CO2nnect pamphlets and ppt-slides from SUPPORT. Maybe 1/2 day workshop.

name	Ernest van Hezik	Lars Monsen	Maria Toth
organisation	Codename Future	Lillehammer University	HERO
_		College	
country	Netherlands	Norway	Romania
1. Who?	Local authority (Breda)	Colleagues of the LUC and for the Film School of Norway	Ministry of Education, Romania
1. How?	start from this city and involve 5 more cities etc.	They are responsible for a competition for a young people film competition. Propose the idea of CO2nnect to them and motivate young people to make movies (very short) for use in schools.	Personal contact and sending promotional materials to be spread in the country
2. Who?	Young reporters	Officials of the County Oppmark and Hedmark.	Local inspectorates
2. How?	second week in March 2009, best clips can take part in Dutch meeting 2009	Present the idea of CO2nnect at a seminar for teachers. The teacher seminars are organized by the county and here I can get some minutes to present CO2nnect.	Personal contact and sending promotional materials to be spread in the country
3. Who?			ONG
3. How?			Personal contact and sending promotion material
4. Who?			AMRO bank
4. How?			Personal contact

name	Erzébet Hajdu	Majda Naji	Mariona Espinet
organisation	Licée Pedagogique	The National Education Institute	Universitat Autonoma Barcelona
country	Romania	Slovenia	Spain
1. Who?	School inspectorate in Mures County	Advisors for primary and secondary education	ESD school program in Catalonia
1. How?	Contact with the responsible of European program (?) and Science inspectors	Seminars, study groups, meetings, ICT	Contacting with the responsible people who we work together and explain
2. Who?	NGO - FOCUS ECO centre, Teacher network	Head teachers in primary and secondary school	Environment Department of City Hall
2. How?	e-mail, media, written media	Seminars, meetings, ICT	Seeing how to connect this campaign with the activities of ESD offered about climate change
3. Who?	Ministry of Education	Teachers in primary and secondary schools	
3. How?	contact the person who is in charge of EE	Seminars, thematic conferences, ICT	
4. Who?	Pedagogical media, NGO media	Head teachers in kindergarten	
4. How?	ICT	Seminars, thematic conferences, ICT	
5. Who?	ECO schools network	Media, Ministry of Education, Steering group of ESD	
5. How?	e-mail	ICT	

name	Anna Widén	Margaret Fleming	Sheila Benell
organisation	Keep Sweden Tidy Foundation	MF Associates	Bangor University College of Education & Lifelong Learning
country	Sweden	UK	Wales, UK
1. Who?	Eco-schools network	RCE - East Midlands school working group	Teacher Mentor Project, teacher mentors
1. How?	Eco-school meeting in November 2008, National ESD network, teacher training, web publications, info on website, e-mails	During face to face meetings - discussions / PPT. via networks, by e-mail (SO + people)	29th Sep, meeting, PPT (translate Reiner's)
2. Who?	Swedish schools	EMNGPS (East Midlands Global Partnership)	Teachers as Mentor Project
2. How?	school fair in Oct (Skolforum) - distribute information (flyers, postcards)	as above	Mentors t advertise to schools
3. Who?		Meeting of the Energy Efficiency Partnerships for homes (EEPA), schools ()	Eco schools, healthy schools, LEAs in Wales and EES coordinator/network + newsletter
3. How?		Face to face meetings and as above	e-mail, send leaflets (Welsh and English)
4. Who?		Association for Science Education Conference participants (Jun 2009). 5000 participants	Teachers in N. Wales
4. How?		At lecture given by me!	Article in Newsletter in January
5. Who?		Triple Science support programme	College of Educator - Key actors and students
5. How?		Via (1) above and also at CPD training for teachers given by me	e-mail, website
6. Who?		DCSF - Jane Reynolds	ESDAC Champion
6. How?			involve in promotion
7. Who?		Eco-schools and other networks etc.	
7. How?		as by action plan	
8.		Government regions, School travel plans, Enabling effective support	

# Appendix 4

# Internal evaluation questionnaire and results PARTNER MEETING 2

# Hanasaari, Finland Sept. 4-5, 2008

	Respondents	Average score
		(1=lowest, 4= highest)
gave evidence of clear planning	26	3,42
had realistic a time scale	26	3,15
allowed enough time to complete the objectives of the seminar	26	2,96
sufficient information and communication previous to the event	26	3,19
Session 1: Presentation and discussion of the CO <sub>2</sub> nnect campaign and its website	25	3,16
Session 2: Reflection about and updating of action plans	25	2,88
Session 3: on project business, the part on information about ongoing work and upcoming event	25	3,24
Session 3: on project business, the part about project management (website, plan, reporting)	24	3,33
Session 4: Final session on evaluation and reflection (about the event and SUPPORT so far)	24	2,96
appropriate content to achieve the aims/objectives of the event	24	3,25
an appropriate mixture of activities: e.g. ice-breaking activities, information-giving sessions, active participation in workshops by participants etc.	26	3,42
good opportunities to know the hosting country and community	24	3,08
good opportunities to gain a better understanding of ESD	24	2,71
good opportunities to understand better the role of ICT in ESD	24	2,71
4. Did we meet the goals that were set for this meeting?		
Prepare for the CO <sub>2</sub> nnect campaign and exchange ideas about how to promote and carry out the CO <sub>2</sub> nnect campaign	26	3,15
Review partner activities to date and revise and update partner action plans	25	3,16
Inform about upcoming events and report on ongoing work	25	3,32
Inform about project management including the project master plan, functions of the SUPPORT website and reporting to EU	25	3,32
Evaluate the event and reflect on work in SUPPORT so far	23	2,70
The event motivated me to be active in the SUPPORT project	26	3,50
was suitable for the working process	24	3,96
offered an appropriate quality of overnight accommodation and meals	25	3,92

took special requirements of participants into account	22	3,59
6. Partnership		
I feel at ease communicating in a different language	24	3,29
I was able to participate in whole group interactions	25	3,80
I established useful contacts with other partners through this event	25	3,72
Differences in viewpoints have been challenging to me during the event	25	3,28
Small group interactions have been useful for me	25	3,40

## PLEASE ANSWER THE FOLLOWING OPEN QUESTIONS:

What I liked most about this event:

What I did not like about this event:

I believe the toughest challenges we have to face in SUPPORT are...

For future partner meetings I suggest...

Other comments...

# ASVII RAR, by AC (A6)

#### Reflective Report on the ARION-LLL Study Visit, Vienna, October 2008

a) Successes, weaknesses and opportunities in relation to the organization of the activity:

#### The quality of the relationship to the local Socrates agency:

We had a good relation to the Austrian LLL Agency. A colleague from there gave a lecture about the EU-LLL-Programme and answered all participant's questions.

#### The quality of the communication with the coordinator

In the organisation team of the Austrian Federal Ministry for Education, Arts and Culture we had a fluent and efficient collaboration. Also all Austrian partners who gave lectures or were hosts for our participants were cooperative, open and liked to present their situation.

#### The quality of the communication with participants

We had a very nice and diverse group of interesting as well as interested participants who enjoyed the group, its size and the intense exchange we had. The social events and excursions supported the communication!

#### <u>Difficulties in relation to the framing and preparation of the activity, etc..</u>

There were no real difficulties. The only problem was the limit of travel allowances by CEDFOP for potential participants, who would have liked to come.

# b) Successes, weaknesses and opportunities in relation to the venue, the uses of diverse spaces, and timing:

The venue was appropriate and travelling within Vienna was unproblematic and helped to get to know the city.

c) Successes, weaknesses and opportunities when dealing with the specific ESD content and ESD visions developed within the activity:

The focus of this study visit was on Research-Education-Cooperation, but ESD was always "around".

d) Successes, weaknesses and opportunities when dealing with the specific activities and ESD learning processes experienced in the activity:

The group mainly discussed possibilities and constraints of the different education systems of their country and developed a list of demands for improvement (see group report).

e) Successes, weaknesses and opportunities in relation to the interaction and exchanges necessary for the building of an atmosphere and also a partnership.

Within the group the communication was very good (see above). A long term effects we can report that we have new and vivid connection to Romania, we gained an interested partner from the Baleares for SUPPORT and CO2NNECT and have all participants on the SUPPORT (and ENSI) mailing list.

The *Feed back and evaluation of the LLL-Study visit by the participants* can be seen in the Section: Organisation of the visit of the official group report. The result is based on individual questionnaires which have been compiled in the overview.

# CSI RAR, by NC (A7)

# **SUPPORT Comenius Contact Seminar** "Partnerships for the Sustainable School"

## Athens, Greece November 24-29, 2008

### Reflective internal evaluation report, by the SUPPORT secretariat

#### About the event

This report is a reflective evaluation of a Comenius contact seminar which was organised by the Kapodistrian University of Athens as part of the EU Comenius Lifelong Learning network project "SUPPORT". The evaluation report is intended for internal feedback and improvement of future events and the SUPPORT activities.

This was the first and only contact seminar to be organised directly under the auspices of the Comenius SUPPORT network. A contact seminar scheduled to be held at the start of the project in 2007 had to be cancelled because there were too few registrations. To compensate, representatives of SUPPORT have participated in two other contact seminars in 2007 (Budapest, Hungary) and 2008 (Nyborg, Denmark).

Because it is the only school contact seminar organised by SUPPORT, this event was a central one for the project. Listed as part of the "exchange of experience" work package in the SUPPORT project proposal, it was intended to allow teachers involved in sustainable development education to improve their understanding and practice of ESD and see examples of good practice. It was also a unique opportunity to create international school partnerships that would carry on a deeper, more long term exchange of experience about collaboration between schools and society in ESD. Several of the partnerships would hopefully also integrate the ICT tools being developed by the SUPPORT project, generating valuable insights. Pr July 24, 2009, we are aware of 1 school partnership has been approved for funding by the EU of the 8 proposals produced by the seminar. More may have been approved without our knowledge.

A participant evaluation was conducted, and the results are appended. Almost all of the participants responded, 48 of the 49 teachers present.

This evaluation is written from the perspective of the SUPPORT secretariat. It is based on the feedback from the participants as well as reflections by the SUPPORT secretariat and SUPPORT partners present, exchanged informally during the event. The local hosts/organisers from the University of Athens will also write an internal evaluation report from their perspective. A public event report will also be available on <a href="https://www.support-edu.org">www.support-edu.org</a> including the program, list of participants, summary of inputs, working methods and results of the 3,5-day seminar.

#### Planning, cooperation and organisation

The Kapodistrian University of Athens offered to organise this contact seminar during the SUPPORT application development phase in 2006. After startup of SUPPORT in late 2007, planning for the seminar was started in a timely fashion (early in 2008) to ensure adequate time to meet the deadline for listing the seminar in the Comenius catalog and to recruit participating teachers.

At this early planning stage, there was discussion about whether the seminar needed to be listed in the Comenius catalog. The SUPPORT secretariat asked the organisers to be sure to get the seminar listed within the deadline, but the Greek national agency informed the partner that this was not necessary, as it already was part of a Comenius Network and therefore an approved activity. Later, several national agencies of SUPPORT partners questioned whether they could use decentralized funding to support teachers to attend this unlisted seminar. The SUPPORT secretariat then contacted Mr. Boullier, the head of the Comenius Lifelong Learning Programme, for clarification. Mr. Boullier looked into the rules more closely. He admitted that the rules were confusing and informed us that only seminars organised by national agencies could be listed and that seminars needed to be listed in order to qualify automatically for decentralized funding through the national agencies.

This was a serious situation, because obviously, if teachers could not get funding to attend from their national agencies, the contact seminar might not get enough participants and might have to be cancelled.

To make the best out of this difficult situation, the SUPPORT secretariat solicited help from the Norwegian national agency, who sent a letter to each national agency in SUPPORT partner countries. The letter informing them about the SUPPORT network, the collaboration with the Greek national agency in organising the contact seminar, and requesting their cooperation and help to ensure the success of the SUPPORT project in which their country was a partner. Each SUPPORT partner was also asked to contact their national agency directly and explain the situation and the legitimacy and quality of the contact seminar.

Happily, almost all national agencies of the SUPPORT partners did eventually offer funding for teachers to attend the contact seminar in Athens. However, a few agencies turned down the applications. This left gaps in country representation at the seminar and disappointed the partners in those countries, who were ready to help schools in their work. In retrospect we would recommend that contact seminars be carried out in even closer collaboration with a national agency, and that they be listed in the Comenius catalog of contact seminars.

After this initial confusion, the collaboration with the Greek national agency during the rest of the preparation and implementation of the contact seminar was very helpful. Representatives of the Greek National Agency were present at the start and conclusion of

the seminar and worked with the participants, giving useful information and advice about the Comenius partnership application process.

The program for the seminar was developed in cooperation between the SUPPORT secretariat, the Greek organisers and the Greek national agency. There were several rounds of comments and adjustments to the program. In particular, the SUPPORT secretariat suggested that more time needed to be dedicated throughout the seminar to the search for partners and the hard work of developing partnership ideas and applications. The number of cultural events initially proposed was reduced to allow more time for these activities.

Throughout the planning process, the University of Athens partners were a pleasure to work with and responded in both a timely and professional manner. They were open to comments and suggestions. They also found appropriate solutions to many issues including fee setting, accommodation, working space, field trips/cultural events, logistics and engagement of assistants, resource persons and speakers.

We were all very relieved when it became clear that there would be enough participants to hold the seminar. The final number of teachers participating was 49. Although this was a large group, it was not too large. Both primary and secondary school teachers were present, and the teachers needed to be able to search and select partners with whom they share common interests and feel thay will be able to work well. The organisers handled the logistics of this large group in an exemplary fashion.

The secretariat should have given the organising partner clearer information at the start about the documentation requirements for reimbursement for organisational work/staff time. This could have prevented some confusion (nothing serious) that arose after the conference. The project leadership has learned by experience and will do better on this point in coming events.

The internal evaluator did not realize that it was necessary to adapt the basic internal evaluation form to ask for feedback about the specific goals, sessions and outcomes of this event. The external evaluator, who was present at the seminar, helped out by developing and copying the evaluation form together with the internal evaluator using email. For future events, the secretariat will remind the internal evaluator in advance of the need to create an adapted evaluation form.

## The program and workflow at the seminar

The work was roughly divided into 3 parts:

Day 1: Introductions, orientations and exploratory discussions and exchange of experience about the meaning of "sustainable schools".

Day 2: Further work on the topic of "Partnerships for the sustainable schools." Search for partners, exchange of experience and ideas on topics and themes for school partnerships (related to school collaboration in ESD).

Day 3: Develop proposals for Comenius school partnerships. Further development/clarification of specific themes and activities for school partnerships.

#### Reflection on Day 1

The feeling sensed by the secretariat during these sessions (and confirmed by the internal evaluation) was that the first day was somewhat overwhelming and confusing for many. However in retrospect it was probably a necessary step when getting to know each other and exploring this kind of broad topic.

Also on the first day, we needed to create a thematic framework through the presentations from SUPPORT, ENSI, the Greek education authorities and Codename Future. The presentations were very variable in form and content. The central ideas of SUPPORT and ESD were presented as a general introduction to the topic. The participants gave feedback on each input; see the appendix.

The group work on the first day demanded full participation by the participants. The energetic and positive leadership of the sessions by Georgia Liarakou was appreciated. However, the day was very long and most people got tired. The topic was new for many and about a third of the teachers indicated through their comments that they were somewhat uncomfortable and pressured during the group work. The topic could be interpreted many ways, the participants did not know each other, and they felt stressed to produce conclusions and proposals. Some struggled with language as well. Many of the teachers were probably not used to discussing in an international group of this kind – so it was a rich if challenging learning experience. "Grumbling" about the difficulty of the work was heard.

At this point the facilitators went around to each group table and relieved the pressure by saying that the purpose was just to exchange preliminary ideas at this phase, and that concrete ideas for partnerships were not expected just yet. The dialogue then began to flow more comfortably again, and the groups developed creative and interesting syntheses and presentations of ideas about "sustainable schools." The ideas coming out of the final plenary session of day 1 were a good "kick-start" for the seminar; however, the room acoustics and the long day detracted from this session.

In summary: on day 1 the teachers jumped "head first" into getting to know each other and conceptions of sustainable schools. There was plenty of exchange during meals and breaks. Interesting posters and presentations did come out of this day, and it was a good platform for the following days of work.

#### Reflection on Day 2

The morning was devoted to a cultural excursion to the Temple of Poseidon. This fantastic site was much appreciated by the participants. Upon return to the Lavrion Environmental Education Centre, and after a good lunch and a tour of the centre and orientation by the

staff about its activities, the group was finally ready to start its work in the mid-afternoon. The orientation by the Lavrion staff could have been shorter and more concise, especially considering the poor acoustics of the main hall at the venue (a converted industrial mining site). It was interesting and a stimulating change of scene to get out of Athens centre and visit the environmental education centre. In future seminars we would suggest to do the hardest work BEFORE the cultural excursion. We could have done the partnership work in the morning and early afternoon, for example, and then taken the excursion to the Temple of Poseidon in the late afternoon.

A poster session was effective in continuing to "break the ice" and giving the partners an opportunity to talk together about ESD and find like-minded partners. On both day 1 and day 2 there was some degree of tension due to the pressure of finding potential partners and topics of shared interest. To defuse this tension, the organisers together with the SUPPORT partners who were present tried to reassure the participants by saying that there are many kinds of projects and approaches. They should listen and be open to alternatives. Just as there are several styles of Greek columns, and all of them are beautiful and effectively hold up the buildings.

We became aware again of the importance of the psychosocial atmosphere: keeping in the comfort zone, keeping positive and optimistic about finding partners and topics rather than stressed. At the same time the participants needed to work hard to create the partnerships, a very challenging task. We feel that we did manage to achieve this balance.

During day 2 and day 3 the SUPPORT secretariat felt it was necessary to repeat that the topic in focus was collaboration for the sustainable school. Collaboration between the school and actors outside (be it local citizens, parents, authorities, research organisations, NGOs) would change the nature of the work and the learning. Collaboration is not necessarily always involved in more traditional environmental education projects or even whole-school sustainable school approaches. In some cases the school may work more or less isolated from society. In the end, most of the partnership ideas did include collaboration with actors outside the school in ESD, and for some it was the central topic.

As the afternoon of Day 2 progressed, the participants converted their anxiety to action and "magically" took control of their own search for partners and development of partnership ideas. The secondary school and primary school teachers definitely wanted to separate by level, whereas the facilitators had asked them to mix levels. The participants took control and created the groups themselves, rejecting the "speed dating" method planned by the facilitator. The teachers broke up into groups of their own making, visited various groups until they found one that worked for them, and then worked intensively with their new partners under tight time constraints.

It was incredible to see this dynamic process, where the participants buckled down, took steering of the process, and actually rebelled and refused to form the groups and methods suggested by the facilitator. Due to this mobilisation of effort by the participants, a set of partner groups actually did crystallize out, with a general idea for a topic they wanted to pursue. The plenary presentations the groups made were inspiring and fun, with many good metaphors and visualisations of ideas. The day's goal was well achieved, but everyone was

exhausted by that point. A huge sigh of relief could almost be heard from the organisers as well as the participants. Everyone had worked very hard and were ready to let the ideas settle overnight before continuing to formulate the proposals on day 3.

By the end of this day we organisers understood much better what the whole PROCESS of finding partners and developing ideas was about - and what a challenging piece of work it is for the participants. We were very glad that enough time had been set off for the group work sessions in the program.

#### Reflection on Day 3

Day 3 was held back at the University of Athens, in a very fine, historic and beautifully appointed faculty club facility. The lounges functioned perfectly as group rooms and the participants were very happy. They went to work immediately in the groups from the day before, concentrated and worked hard all day and managed to complete their applications. The representative of the Greek national agency was present and gave a brief presentation.

Mr. Michael Butterworth from the UK National Agency was present during the entire seminar. He went around to the various groups on Day 3, giving essential tips, advice and information. He deserves quite a lot of the credit for the applications actually being completed. In future seminars we recommend having a person from a national agency present to help in this way, working with the groups and answering specific questions. It is easy to get bogged down in the rules and paperwork, and lose sight of the goal: a dynamic international school partnership on an exciting topic. Mr. Butterworth gave everyone the feeling that it was realistic and possible to achieve this, despite the demands of the application process and EU administrative rules.

## Proposals for new Comenius school partnerships

Eight proposals came out of the Comenius Contact Seminar, listed in the appendix. These had been refined from the day before and were again presented in plenary. We can see from the topics that the participants had come a long way in developing their ideas, plans and partnerships in only 3 days. They were encouraged to specify even more clearly what their theme was about, how they would work with it, and the products. They were also told that the SUPPORT network as well as national agencies would be available to help in the final stages of the applications.

# Exchange of experience and intercultural learning

The final plenary presentation by the groups and handing out of certificates was heartwarming and fun. We had been through a very intensive 3 days together and bonds had formed on both an individual and group level. It was really a fine group, and the participants seemed rightfully proud of their achievements.

A delicious Greek lunch at the faculty club and packets of Greek goodies for each participant from the hosts were extremely nice touches. The organising team did a great job, working smoothly and diligently in the background to make everything run well, and

they were also duly recognized and thanked by both the SUPPORT secretariat and the participants.

When planning a seminar of this kind, one should not underestimate what a challenge it is for teachers to be thrown into a situation and group of this kind and expected to produce proposals for partnerships. Language and cultural barriers are considerable. We suspect that the main results of this kind of seminar are (in addition to the partnership proposals of course) the awareness gained by each participant through exchange of school experience and discussion with teachers from other countries with different school cultures as well. There is A LOT of intercultural reflection and learning going on.

#### **SUMMARY**

From the point of view of the SUPPORT project, this Comenius Contact Seminar was highly successful and an important contribution to the SUPPORT project. There was an ideal number of participants, the program and the organisation "worked" and the participants (not least due to their own engagement and hard work) developed 8 Comenius school partnership applications. There was an intense international and intercultural exchange on the topics of ESD partnerships and sustainable schools.

Despite confusion about the Lifelong Learning Programme rules, decentralized Comenius funding was made available to applicants from most of the SUPPORT countries to attend the seminar. In the future, contact seminars should be arranged by the National Agency in collaboration with the network partner. This will allow the seminar to be listed in the Comenius database and thus open to applicants from all eligible countries.

Participant evaluations of the event were very positive, although some details of the program and venues could be improved. The setting of Athens, the University and the cultural excursions were highly valued.

The 3 days were very intensive and challenging for the participants. Our feeling as organisers is that this was unavoidable, and indicates that the time and resources were used well.

# **Appendix 1. Participant evaluation results**

Respons	ses were on a scale of 1-4 where the most affirmative as 4.	4 pts	3 pts	2 pts	1 pt	Average score (n)
1. The or	ganisation of the partner meeting		•		•	
•	gave evidence of clear planning	27	19	1		3.55 (47)
•	had realistic a time scale	18	19	10		3.17 (47)
•	allowed enough time to complete the objectives of the seminar	16	24	6		3.22 (46)
•	sufficient information and communication previous to the event	22	18	7		3.32 (47)
2 How II	seful were each of these sessions?					
2. 110W U	Overview and aims of the seminar	27	21			3.56 (48)
•	Presentation of the SUPPORT network and CO2nnect	30	15	3		3,56 (48)
•	campaign and website		10	ľ		0,00 (10)
•	Presentation of the European Lifelong Learning Programme	17	25	6		3.02 (48)
•	Tools for creating school partnerships and networks developed by the ENSI network	18	24	4	1	3.26 (47)
•	Codename Future presentation on "youngsters as equal partners in fostering SD"	23	18	7		3,33 (48)
•	SD Greek national policy on ESD	8	19	10	8	2,60 (45)
	seful were each of these group work or visit sessions?					1 , ( )
•	Characteristics and criteria of quality for "sustainable schools"	16	24	7	1	3.15 (48)
•	Partnerships for a sustainable school	20	24	3	1	3,31 (48)
•	Project application session	20	22	4	2	3.25 (48)
-	Lavrion Environmental Centre presentation and visit	9	23	11	5	2,75 (48)
4. The na	artner meeting provided	1 -		1		=,: 0 (:0)
•	appropriate content to achieve the aims/objectives of the event	23	25			3,48 (48)
•	an appropriate mixture of activities: e.g. ice-breaking activities, information-giving sessions, active participation in workshops by participants etc.	27	20	1		3.54 (48)
•	good opportunities to know the hosting country and community	16	21	10		3,13 (47)
5. Did we	e meet the goals that were set for this meeting?					
•	Good opportunities to know each other	35	11	2		3.69 (48)
•	Good opportunities to clarify personal views on central concepts and ideas	22	20	5	1	3.31 (48)
•	Good information on how to prepare and apply for a Comenius school partnership	24	20	4		3.42 (48)
•	Good information about SUPPORT project and future opportunities to participate in campaigns and events	33	9	5		3.60 (47)
•	Good opportunities to build partnerships for Comenius school networks	31	15	1		3,64 (47)
6. The ve			<u> </u>		l l	I
•	was suitable for the working process	24	18	6		3.38 (48)
•	the chosen hotel offered an appropriate quality of overnight accommodation and meals	32	13	1		3.67 (46)
•	the organisation took special requirements of participants	31	14	2		3.69 (45)
7 Interci	into account ultural exchange					
•	I feel at ease communicating in a different language	26	16	2	3	3,38 (47)
•	I became more aware of the usefulness of intercultural	31	14	2		3,62 (47)
•	exchange during the event I established useful contacts with other partners through this event	39	8			3.83 (47)

•	Differences in viewpoints have been challenging to me during the seminar	28	14	3	1	3.50 (46)
8. Refera	nce questions					
•	My National Agency was supportive to me	26	9	4	2	3,44 (41)
•	My institution is already involved in ESD	18	13	7	7	2,93 (45)
•	I am professionally involved in ESD	14	16	9	2	3,02 (41)
•	I am personally involved in ESD	21	16	5	2	3,27 (44)

#### Comments by the participants (xx = ineligible)

#### What I liked most about this seminar:

- Use of different venues for sessions. Excellent cultural activities.
- Intercultural exchange. See projects growing.
- Good organization. Cultural exchange and opportunities to establish contacts.
- Contact & sharing of experiences, ESD, education, culture, etc.
- It was very well organized and arranged!.
- Good organization. Cultural exchange and opportunities to establish contacts. People.
- It was very useful. It would be useful that it would be whole Thursday and Friday time to do our own plans with own partners.
- Meeting all and new "sustainable" friends. Open conversations and cooperation.
- The contact with other persons, and the presentations of different group (SUPPORT etc. ENSI...).
- Talking with people from many different cuntries. Getting to know very interesting people.
- The kindness of all.
- Meeting colleagues and sharing experiences and goals seeing so.
- Meeting partner countries and making new friends.
- Meeting people from other countries; visiting Athens.
- The energy flow and spirit of participants and organizers.
- Well planned and organised seminar.
- Getting to know each other and built parnerships.
- Contact to other nations. The friendly Greek people.
- Contact with other countries, discovering similarities and differences, making plans for the future with other countries.
- Codename future, CO2nnect, Visit at Suonio(z) (temple). Sharing information about different ways to work on the theme with other schools.
- The venues in general were excellent and well organized.
- The atmosphere was great!.
- Meeting people from different cuntries. The drive in people to find partners to form partnership.
- Intercultural exchange.
- The people I meet.
- The presentation each country. Planning our project.
- The opportunity to meet colleagues from other countries, get to know them + exchange ideas.
- The possibility to meet other people and interchange ideas and experiences.
- It was intercultural, with different approaches.
- Openess, hospitality.
- Good information on how to prepare for a Comenius school partnership.
- Efficiency, great results in short period.
- The good organization and the quality of presentation.
- Contact with others.
- Organization team: good + friendly team. International atmosphere.
- Group work.
- Workshop with partners.
- Informative. I meet friends that developed a good project.

#### What I did not like about this seminar:

- There was a little confusion over the aims of SUPPORT and the use of Comenius school partnerships to reach these aims. Thus I felt overcome by day 3.
- Too many hours per day working. Not enough free time to visit the city.
- The hotel was too good for a contact seminar and was not managed in a "sustainable" way, new towels daily, etc.
- I would have liked more opportunity to see ESD in action, eg. visits to special sites, schools, etc.
- Work stops were difficult in noisy areas.
- Too many hours per day working. Not enough free time to know Greek culture.
- Lavrion was not very successfull, except for the last part forming the groups.
- -Sometime I can't understand the persons' presentations: Lavrion, the Greek National Policy,...
- -Nice localities but bad acoustics.
- -The short time to visit the town.
- -That I participate for the first time.
- -Nothing really but the days were long.
- -A little less directive, but more structure by example.
- -Lack of time to plan our project (1.5-2 days would be better). The days were very long.
- Personally I wasn't too crazy about the food. There wasn't too much time reserved to explore Athens (on the other hand the programme was well-prepared).
- Nothing.
- It was too full of of things and presentations and felt we had no time to think.
- Wednesday afternoon.
- The mix of schools wihich were not eligible to form partnerships with.
- Too little time to see the posters. Too much and long theory lessons.
- Some people come with their own agenda were not ready to accept others' views of ideas.
- For group work there should be prepared separate rooms.
- Long working hours, see so little of Athens.
- Not enough time for personal reflections.
- Schedule too packed, no leisure time for thinking and evaluating **SUPPORT**.
- It was too intense.

# What I had discovered/better understood about partnership and intercultural exchange during this seminar:

- That all are happy or unhappy but can be happy.
- Concepts on the same topic are closely linked to regional circumstances and cultures!
- The importance of the English language and intercultural communication.
- We as teachers have the possibility of changing minds, to work together for a best Europe, to learn from each other.
- Posters shouldn't be presented on the first day.
- The working among our new partners was much more committed than in our former Comenius project.
- It is important to communicate in clear words!
- There many people interested in contact with other schools.
- I now have a deeper understanding of sustainability beyond environmental activities.
- How to apply for Comenius partnership.
- "Sustainable school" is more then sorting waste...!
- Rules/How to establish a partnership.
- All countries have different thoughts about how do work in this way.

There are differences between persons, schools & countries and we accept them.

- It is important to clarify ideas and develop an understanding of the other countries.
- -"Cleopatra" (Greek organiser Maria) was good!
- Group work.
- I have enjoyed working with other colleagues.
- To respect and be blended with the others. To accept the point of views of the others.
- Some people come with their own agenda were not ready to accept others' views of ideas.
- Is that is based on respect.

# What I had discovered/better understood about 'sustainable schools' during this seminar:

- I am new to these topic and I found the information very interesting and useful. I will be able to advise UK schools and local authorities.
- Sustainable schools give us the opportunity to face environmental and social problems, so we can involve all the community in it in order to change people's mind and to create new habits.
- Taking varying opinions and viewpoints into consideration.
- To be clear and short in the thoughts and aims.
- It's something good to do.
- Application process clear.
- That all schools in all countries are trying to make a difference and all face similar problems.
- What "Sustainable schools" means, what we and other schools already do.
- That it might be more than just environmental issues in the xx
- Again we need not to be afraid of using succesfull concepts of development
- "Sustainable" is a word which can be interpreted in a wide variety of ways.
- Group work.
- We use different "words" but are using similar approaches + working to a common goal.
- We all were interested in creating partnerships and how improve our idea of being a sustainable a school.
- 3P method.
- I have realised the meaning of "sustainability" and the criteria to reach that at school.
- That it is a new way of thinking, is based on vision and is for a better future. It's not only "environmental", it has a social & cultural dimension too.

#### Other comments...

- Excellent Seminar. Thanks to SUPPORT Comenius Network and Greek organisers
- Thanks you very much your very enganged work for the seminar.
- I have a good time. Thank you to all the Greek hosts for the organization.
- It was very nice time in Athens!
- The partners may have been introduced in an earlier stage, because people seemed to be very eager to get started. However, we had good time in getting there just in time.
- Athens is very beautiful place and people are very nice.
- Thank you very much, you did it very personal and I enjoyed it very much.
- See you soon!.
- I was interesting to hear how colleagues in the secondary schools will undertake projects. It made the primary sector feel part of an ongoing process.
- Very enjoyable and inspirational seminar. Thank you to Greece for being super hosts.
- A realistic project proposal is a result.
- Thank you Athens!.
- I think that there should be more free time to speak and work together with the partners-to-be and make xx
- Thanks a lot.
- A well organised and useful seminar.
- Excellent.
- Thank you for your warm welcome.

# **Appendix 2 Programme of the Comenius Contact Seminar**

## Tuesday, November 25

16.00 – 17.30	Arrival and registration of the participants
17.00 – 18.00	Welcome tea-and-coffee meeting
18.00 - 18.30	Opening of the seminar and organizers' we

18.00 – 18.30 Opening of the seminar and organizers' welcome
18.30 – 20.00 Presentation of all the participants through ice-breakers activities

20.30 Dinner at the hotel

## Wednesday, November 26

Morning session at Vent	ue: 'loannis Drakopoulos' University Conference Hall
0.00 0.40	Formal analysis of the consiser and welcoming of the neutrinomia by Evenie Floreitie

9.00 - 9.10	Formal opening of the seminar and welcoming of the participants by Evgenia Flogaitis (University of Athens)
9.10 – 9.30	Overview and aims of the Comenius Contact Seminar "Partnerships for the development of
	the sustainable school" by Maria Daskolia (University of Athens)
9.30 - 9.50	Welcoming and brief presentation of the SUPPORT network: Astrid Sandas (SUPPORT
	network director) and Faye Benedict (SUPPORT network coordinator)
9.50 – 10.10	Welcoming and short presentation of the national policy on Education for Sustainable
	Development in Greece: Sophia Theodoridou (Greek Ministry of Education)
10.10 – 10.30	Welcoming and introduction into the Comenius school networks: Leonidas Papastergiou
	(Comenius National Agency, Department of Lifelong Learning Programmes
10.40-11.00	Tools for creating school partnerships and networks within the realms of Education for
	able Development: Christine Affolter (ENSI Vice President)
11.00 -11.30	Coffee break
11.30 - 12.00	The European CO2nnect climate campaign and how European schools can join it: Faye
Benedict (SUPPORT netwo	,
12.00 - 13.00	"Youngsters in the driver's seat in schooltime" or "How can we involve students as equal
	partners in fostering sustainable development in the local/ regional level": Ernest van Hezik
	(SUPPORT network partner, Board member of Codename Future) and Rob Maessen
	(Representative of the Dutch local authority of Noord Brabant, the Netherlands)
13.15 - 14.30	Lunch at the hotel
14.30 - 15.00	City walk from the hotel and through the Athens downtown shopping centre to the 'Paleo
	Panepistimio' (The Old University) Hall

#### Afternoon session at Venue: 'Paleo Panepistimio' University Seminar Hall

Alternoon sess	non at venue. Faleo Fanepistinno Oniversity Seminal Hall
15.00	Arrival at the 'Paleo Panepistimio' Hall
15.00 - 15.30	Athens sightseeing from the top of the 'Paleo Panepistimio' Hall
15.30 – 17.00	"The sustainable school": What are its characteristics and criteria of quality? Group work coordinated by Georgia Liarakou (University of the Aegean)
17.00 -17.30	Coffee break
17.30 - 18.30	"The sustainable school": What are its characteristics and criteria of quality? Presentation and
discussion of ide	eas derided from the groupwork. Plenary session coordinated by Georgia Liarakou (University of the
Aegean)	
18.30 – 19.30	Developing and discussing initial ideas for Comenius school networks towards the 'sustainable
school': "What c	ould my school do? Are there any other interested schools to join us?" - Group work and presentation of
ideas	
19.30 - 20.00	City walk in the picturesque Plaka, the touristic heart of Athens downtown
20.00	Dinner at a traditional Greek taverna

## Thursday, November 27

#### Morning field trip to Cape Sounion and Lavrion Environmental Education Centre

9.15 - 10.00	Short 1	tour	of	the A	Athens	downtow	n by co	ach
	_			_	_	-		

10.00 - 12.00 Excursion to Cape Sounion, one of the most scenic coastal places of the region of Attica.

Visit to the archeological site of Sounion, the ancient Greek temple of Poseidon

12.30 – 13.30 Visit to the Lavrion Environmental Education Centre, situated in the Lavrion Technological

Park. Welcoming and information about the Center and its activities by its director Thodoris

Papapavlou. Short walk and guided tour in the premises of the Technological Park

13.30 - 14.30 Lunch at the Lavrion Environmental Education Centre

#### Afternoon session at Venue: Lavrion Environmental Education Centre

14.30 -16.00 "Partnerships for a sustainable school": Exploring the concept of "partnership" and the role of the local communities, organizations from the public and private sector and research institutions in the development of the sustainable school. Group work coordinated by James Hindson (ESD educator/consultant)

16.30 - 17.00 Coffee break

16.30 – 17.30 "Partnerships for a sustainable school". Group work to further develop ideas and activities for possible school networks coordinated by James Hindson (ESD educator/consultant)
17.30 – 18.30 "Partnerships for a sustainable school". Presentation and discussion of the ideas coming out

of the groups. Plenary session coordinated by James Hindson (ESD educator/consultant)

18.45 - 20.00 Drive back to Athens 20.00 Dinner at the hotel

#### Friday, November 28

#### Morning session at Venue: 'Kostis Palamas' University Seminar Hall

9.30 - 9.45 Information about opportunities to join upcoming events organised by SUPPORT in 2009 and 2010 (Faye Benedict, SUPPORT network coordinator)

9.45 – 10.30 How to complete an application form and tips for successful bids: Spyros Hatzipapas (Comenius

National Agency, Department of Lifelong Learning Programmes). Questions and answers. 10.30 –11.00 Sharing of project plans and search for interested partners: group work

11.00 - 11.30 Coffee break

11.30 – 13.00 Group work to further develop network ideas, project plans and applications

13.00 – 14.30 Farewell lunch

#### Afternoon session at Venue: 'Kostis Palamas' University Seminar Hall

14.30 –16.00	Group work to complete applications for European school network projects
16.00 – 16.30	Coffee break
16.30 – 17.30	Presentation of partnerships and projects: Plenary session coordinated by Spyros
	Hatzipapas (Comenius National Agency, Department of Lifelong Learning Programmes) and
	Faye Benedict (SUPPORT network coordinator)
17.30 – 18.00	Concluding session. Evaluation of the Contact Seminar by Michela Mayer (ENSI specialist)

18.00 – 20.00 Free time

20.00 Dinner at the hotel

#### Saturday, November 29

7.00 – 12.00 Departure after breakfast

# Appendix 3. List of participants at the Contact Seminar

	Name	Country	School
TFAC	CHERS	,	<u> </u>
1	Rainer Blaschke	Austria	Hauptschule Feldkirchen
	0, 1101		1/4   1   1   20   1/4   1   1
2	Sigrid Pirker	Austria	Volksschule 23 – Klagenfurt
3	Ursula Pushinger	Austria	Hauptschule Feldkirchen
4	Maria Loizou	Cyprus	Lykeio Agiou Ioanni - Limassol
5	Antouaneta Skordi	Cyprus	Ayios Maronas Elementary School
6	Mervi Aineslahti	Finland	Sorrila school
7	Jukka Alatalo	Finland	Kaakkuri school
8	Annukka Alppi	Finland	Mahnala Environmental School
9	Katja Harju	Finland	Sorrila school
10	Tuula Lindfors-Sivonen	Finland	Hönttämäen koulu
11	Ritva Keskipalosaari	Finland	Kaakkuri school
12	Minna Korpi	Finland	Kaakkuri school
13	Jorma Kytökangas	Finland	Tuira School
14	Taija Paunu	Finland	Mahnala Environmental School
15	Saloranta Seppo	Finland	Hönttämäki School /
			Timosenkoski Natureschool
16	Stavroula Altanopoulou	Greece	4rth Primary School of Lavrion
17	Maria Kampyli	Greece	Gymnasium of Astros
18	Georgia Kotsari	Greece	4rth Primary School of Lavrion
19	Hero Papadaki	Greece	Evangeliki Scholi Smyrnis
20	Panagiotis Tragazikis	Greece	3rd Primary School of Paleo Faliro
21	Zsanna Morseman	Hungary	Petőfi Sándor Gimnázium
22	Maria Nemeth	Hungary	Petőfi Sándor Gimnázium
23	Julia Retzlaff	Luxembourg	Lycée Technique de Bonnevoie
24	Christian Richartz	Luxembourg	Lycée Technique de Bonnevoie
25	Rovers Cor	The Netherlands	Praktijkschool de rijn
26	Wim van Zelst	The Netherlands	CSG Calvijn, Maarten Luther
27	Wilma van Kooten	The Netherlands	Rijswijks Lyceum
28	Geir Ekre	Norway	Vest-Telemark high school.
29	Arnstein Håvik	Norway	Aaretta ungdomsskole, Lillehammer
30	Karl Torstein Hetland	Norway	Vest-Telemark high school
31	Knut Øilo	Norway	Lesterud Skole
32	Gunnar Albert Sandvik	Norway	Vest-Telemark high school
33	Bajko Ildiko	Romania	"Batthyany Ignac" Technical College
34	Russu Claudia	Romania	REBRICEA SCHOOL
35	Ligia Stancu	Romania	"Marin Preda" High School
36	Simona Crasnic	Romania	Technical College of Constructions and
			Environmental Protection
37	Rosenbergová Zuzana	Slovakia	Primary school Dr. Janského č.2
38	Mateja Turk	Slovenia	Secundary School Of Traffic
39	Alba Cera Costa	Spain	Ceip Santa Creu

40	Nicolás Gómez Bonal	Spain	C.R.A Los Molinos (Higueruela/Albacete)
41	MªJosé Ferrando Poquet	Spain	C.P. Puig D'en Valls (Ibiza/Spain)
42	Maria Rosario Pérez Campos	Spain	Sant Rafael Primary School
	'	'	La Nucia (Alicante)
43	Marianne Blaser	Switzerland	Kindergarten und Primarschule Düdingen
44	Michele Joss	Switzerland	Primarschule Bern, Rossfeld
45	Sion Glyn Pritchard	United Kingdom	Ysgol Gynradd Llandegfan
46	Jonathan Brough	United Kingdom	Worthen Primary School
	Ŭ		,
47	Suzanne Birch	United Kingdom	St John the Baptist (C of E) Primary School
			Ruyton X1 Towns.
48	Judith Thomas	United Kingdom	Eastern Primary School
49	Elaine Doherty	United Kingdom	Ballynure Primary School
FACII	ITATORS		
.,	Sophia Theodoridou	Greece	Greek Ministry of Education
	Leonidas Papastergiou	Greece	Comenius National Agency, Department of Lifelong
	2007 IIddo 7 dpdotorgiod	0.0000	Learning Programmes
	Evgenia Flogiatis	Greece	Kapodistrian University of Athens, SUPPORT
	Lvgoriid i logidilo	0.0000	partner
	Maria Daskolia	Greece	Kapodistrian University of Athens, SUPPORT
			partner
	Georgia Liarakou	Greece	University of the Aegean
	Spyros Hatzipapas	Greece	Lifelong Learning National Agency
	Thodoris Papapavlou	Greece	Director, Lavrion Environmental Education Centre
	Astrid Sandås	Norway	Norwegian Directorate of Education and Training,
		,	SUPPORT Beneficiary Organisation
	Faye Benedict	Norway	Norwegian University of Life Sciences, SUPPORT
		,	Coordinating Organisation
	Mari Ugland Andresen	Norway	Norwegian University of Life Sciences, SUPPORT
		-	Coordinating Organisation
	James Hindson	United Kingdom	Field Studies Council, SUPPORT partner
	Michael Butterworth	United Kingdom	Lifelong Learning National Agency
	Ernest van Hezik	The Netherlands	Codename Future, SUPPORT partner
	Rob Maessen	The Netherlands	Local authority of Noord Brabant
	Michela Mayer	Italy	SUPPORT external evaluator
	Christina Affolter	Switzerland	ENSI, SUPPORT member
	Assisting staff of University of Athens	Greece	Kapodistrian University of Athens, SUPPORT
	,		partner
	Assisting staff of Lavrion Environmental	Greece	Lavrion Environmental Education Centre
	Education Centre		

## Appendix 4. Comenius school partnership applications, developed during the contact seminar.

#### 1. Title: Mind over matter

Contact person: Elaine Doherty e-mail: edoherty598@c2kni.net

Countries: Greece, Spain, UK (Wales and Northern Ireland)

Co2nnect? YES

Project ideas: Energy consumption, visit all 5 countries collection of data, share, compare, analyse

- bring about change, attitudes of staff, students, parents and the wider community

#### 2. Title: School as a local partner for sustainable development

Contact Person: Karl Thorstein Hetland

e-mail:

Countries: Netherland, Romania, Cyprus, Norway

C02nnect: YES

Project ideas: Start with Co2nnect, meet November 2009 and present results of the Co2nnect

project – active citizens as main theme at the November meeting.

#### 3. Title: Responsibility = Freedom

Contact person: Wim van Lelst e-mail:

w.a.van.zelst@calvyn.nl

Countries: The Netherlands, Romania, Greece and ?? (will try to find more partners)

Co2nnect: YES

Project ideas: 2 cycles: 1) Environmental aspects, 2) Children's welfare

Product: A CD, maybe a play, film or website

#### 4. Title: Green Point- Activities for sustainable learning

Contact person: Jonathan Brough

e-mail: thehead@worthen.shropshire.sch.ok Countries: Austria, Finland, Spain, UK, Norway

Co2nnect: YES

Project ideas: Whole school development: management, child lead learning (decision making and environmental activities). 'Green Point': physical focal point for sustainable development at each school, with resources etc., A project mascot wil be elected amongst the pupils and will travel around to the project schools to remind them of the themes. Communication: Video workshops etc., website (Co2nnect).

#### 5. Title: Opening windows to European Communities

Contact person: Katja Harju e-mail: katja.harju@vlk.fi

Countries: Cyprus, Spain, Finland x 2, Switzerland x 2 (will try to find another partner, possibly from

Norway)

Co2nnect: YES (possible two times during the project to compare between seasons) Project ideas: Know and respect different cultures, focus on socio-cultural dimensions of sustainable development, will produce video and blog, 4 meeting during the project time

#### 6. Title: Knowing me, knowing you - is the best I can do

Contact person: Rainer Blasche e-mail: direction@hs-feldkirchen.at

and Jukka Alatola

e-mail: jukka.alatalo@ouka.fi

Countries: Finland, Austria, and hopefully Norway, Italy and Denmark

C02nnect: MAYBE

Project ideas: Develop the school as a learning organisation- ABBA (Able to be aware of sustainability)

#### 7. Title: Sustainable Puzzle

Contact person: Julia Retzlaff and Christian Richartz

e-mail: <u>Julia.retzlaff@education.lu</u> <u>Christian.richartz@education.lu</u>

Countries: Greece, Netherlands, Slovenia, Romania, Hungary, Luxembourg

Co2nnect? YES

Project ideas: Ecological footprint, evaluate footprint every year and compare changes, puzzle 7

pieces. Possible products. Book with documentation, internet page etc.

#### 8. Title: Quality now and tomorrow

Contact person: Seppo Saloranta e-mail: seppo.saloranta@ouka.fi

Countries: Finland, Slovakia, UK, Spain, Greece, Czech republic

Co2nnect: YES

Project ideas: Start with Co2nnect- Create DVD with case studies + website

# WSII RAR, by AC (A9)





# Biodiversity in Education for Sustainable Development Reflection on SCHOOL-RESEARCH COOPERATION

24 - 27 September, 2009, in Reinhardswaldschule in Fuldatal (Germany)

### **Activity report**

Karin Ulbrich Helmholtz Centre for Environmental Research-UFZ Karin.Ulbrich@ufz.de



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#### 1 Summary

The Biodiversity workshop took place in Fuldatal near Kassel (Germany) from 24 to 27 September 2009. It was attended by 32 participants from 13 countries. The meeting aimed to explore how schools and researchers can collaborate to create high quality education on biological diversity, building a bridge between scientific theory and educational practice. The workshop was intended for teachers and teacher trainers with experience in biodiversity education who wanted to learn more about how schools can collaborate fruitfully with research to improve education. Scientists and specialists involved in biodiversity education and education for sustainable development were also encouraged to attend. As a result of the discussion most participants increased their own competence about how schools can collaborate fruitfully with research to improve ESD. Also, the majority of them became more aware of the usefulness of intercultural exchange and established useful contacts with other participants.

By trying out four concrete internet educational and communication Tools (ICT) participants got informed about their great potential for ESD. They learned how to apply ICT to formal and informal education. Students will gain competencies and skills such as (i) acquiring scientific knowledge and applying it to practical activities and (ii) communicating and evaluating results of interactive search and simulation. One important outcome was that using ICT students can be motivated to go "from the computer to nature".

The workshop succeeded in creating a meeting place for teachers, teacher trainers, scientists and education specialists. Good opportunities were given for sharing own experiences and for cross-pollination of ideas and perspectives.

#### 2 Introduction

The workshop was organized by the Helmholtz Centre for Environmental Research- UFZ (<a href="www.ufz.de">www.ufz.de</a>) as part of the EU Comenius Lifelong Learning project "SUPPORT: Partnership and participation for a sustainable tomorrow" (<a href="http://support-edu.org">http://support-edu.org</a>). The meeting aimed at enabling teachers and environmental educators to

- Appeal widely to all kinds of pupils
- Be scientifically sound and develop critical thinking
- Use ICT effectively
- Promote understanding of the complexity of biodiversity issues
- Motivate pupils to act to protect and preserve the diversity of nature
- Provide opportunities for pupils to do research and contribute to knowledge about biological diversity.

One focus of the workshop was to assess the "state of the art" of school-research collaboration regarding biodiversity and highlighting examples of good practice. Presentations and group work gave participants the opportunity to share their own experiences, then explore in detail the challenges and promise of high quality education on biological diversity and sustainable school-research collaboration.

Workshop success was favoured by a good mixture of activities such as high quality plenary talks, active participation in working group discussions, trying out computer tools, visit to an outdoor centre for environmental education (Wasser-Erlebnishaus), and a trip to the city of Kassel. Altogether, the seminar program was appropriate for achieving the goals of the workshop. More than 15 participants submitted papers for the workshop book which will be published by PENSOFT Sofia in spring 2010.

The workshop was listed in the Comenius-Grundtvig training database with the reference number DE-2009-840-001. Eleven teachers applied via this database and attended with funding from the EU. Among the 28 attendees there were

- 9 teachers of Primary schools (among them 2 headmasters)
- 6 teachers of Secondary schools
- teacher trainers
- environmental educators
- scientists
- 4 school students (13 grade)

Workshop participants were coming from 13 countries: Slovakia, Hungary, Spain, Greece, Finland, Romania, France, Belgium, UK, Bulgaria, Austria, USA, and Germany.

#### 3 Description of activities

Welcoming addresses were given by hosts Karin Ulbrich from the Helmholtz Centre for Environmental Research-UFZ and by Reiner Mathar from the Authority for Teacher Training in Hesse. Several presentations were made to introduce the workshop topics of biodiversity education in the context of ESD and the challenge of collaboration between schools and research. Head teacher Egbert Weisheit from the Friedrichs-Gymnasium Kassel and four of his students (13 grade) presented projects they have done in class 12.

# 3.1 Input about Biodiversity Education, ESD and the collaboration between schools and research institutions

- Prof. Dr. Armin Lude (University of Education, Ludwigsburg, Germany) stated that, in his view, important components of ESD are:
  - Ethical components like the demand for intra- and intergenerational justice (e.g. equal chances for an adequate quality of life for present and future generations)
  - Temporal components like the orientation towards a sustainable future. This involves acting in an unpredictable field, planning in a proactive way, considering consequences of acting or non-acting
  - Cross-disciplinary components like interrelatedness and interdisciplinary thinking
  - ➤ Key issues of ESD besides well-known areas like preservation of nature and of natural resources are also topics like mobility, justice, culture and cultural diversity, fair trade and participation

- Educational principles are systemic thinking and problem solving approaches, orientation towards values, co-operation, participation and action orientation, selforganizing and a holistic perception
- Reasons and consequences of biodiversity loss are complex issues involving all dimensions of sustainable development (social, economic, ecological). A typical resource dilemma occurs, when a common open-access resource is (over)used, consequences occur time-delayed, and individual advantages result in commonly carried disadvantages
- ➤ Three groups of students have been identified: group A (48%) who prefer anthropocentric arguments (aesthetic, recreation, economic, scientific) but also biocentric, holistic and religious arguments, group B (35%) who trust mostly in economic points, and group C (17%) who prefers biocentric, holistic or religious arguments.
- Reiner Mathar pointed out that the SUPPORT network aims at developing wide competencies in ESD, strengthening collaboration between schools and researchers, schools and communities, and schools with schools. For most of participants, information about SUPPORT was new and highly motivating.
- Oliver Schweiger gave an overview on the EU-funded ALARM project (A LARge scale risk assessment for biodiversity with tested Methods; 2004 to 2009; <a href="www.alarmproject.net">www.alarmproject.net</a>) which has been based on the partnership of more than 250 scientists from 36 countries. This largest FP6 research project on terrestrial biodiversity focused on four topics: Climate change, pollinator risks, environmental chemicals, and invasive species. Three basic scenarios of possible future worlds have been developed which are the taken as the basis for projections of future species distributions throughout Europe. These scenarios differ from well-known climate scenarios (IPCC) by describing in narrative form socio-economic aspects such as possible decisions in policy, developments in agriculture, education, transport, tourism etc. The scenarios are
  - SEDG (Sustainable European Development Goal),
  - > BAMBU (Business as might be usual) and
  - GRAS (Growth Applied Strategy). The scenario approach is useful for ESD as it favours development of critical and dynamic thinking. The educational project PRONAS (see below) emerged as a follow-up of ALARM.
- The teachers' network Science Across (<u>www.scienceacross.org</u>) was presented by Egbert Weisheit.
  - > 7,947 teachers in 147 countries are collaborating in this network on school science topics.

- > Students and teachers develop contacts and links with other schools in different parts of the world
- > Students are interested and motivated by global science issues and communicating with other young people from different countries and cultures
- Students look at the wider aspects of science around issues of diet and health, genetics, the environment and energy use
- Students develop Key Skills in Communication, ICT, Working with others and Problem Solving
- Students develop Thinking Skills in Reasoning, Enquiry, Creative thinking and Evaluation
- Teachers can develop different pedagogic skills and extend science into cross curricular activities, including citizenship and sustainable development education.

### 3.2 Presentation of internet tools for Biodiversity education and ESD

ICT presentations played a significant role for the learning process on the workshop. The four ICT presented are summarized in table 1 in the appendix.

Marie Studer, Harvard University, Museum of Comparative Zoology, USA, presented "Encyclopedia of Life - EoL" (www.eol.org).

The EOL Learning + Education Group, in partnership with educators in both formal and informal settings, seeks to transform how students learn about biodiversity by providing easy access to authoritative content and by encouraging them to participate in building the Encyclopedia of Life. By expanding and deepening the collective understanding of species, EOL offers a unique opportunity to create a global community of learners with enormous potential to inspire future generations of scientists and stewards of our living planet. The EOL team encourages the participation and insights from educators and learners wherever they may be around the globe.



Fig. 1: Encyclopedia of Life in the web

 The Internet program "NatureGate" (www.luontoportti.com/suomi/en/) was demonstrated by Arja Kaasinen from Helsinki University.

NatureGate's services enable the user to enjoy and learn about many aspects of nature in Finland. The website provides a wealth of information about Finland's plants, birds and butterflies, as well as many pictures of our featured species. One can even identify plants using a unique species-identifying tool: Choosing one of the four main plant feature categories and clicking then on a category icon, a set of second-level symbols will appear. By choosing one of these, the user will get another set of icons on the third level. When he clicks on one of these, he will get a list of plant names and images for plants which have this feature. The more third-level choices in different categories the user makes, the smaller number of possible plants will remain on his list. NatureGate is becoming very popular in Finland. The development team intends to make the tool available for students throughout Europe.



Fig. 2: NatureGate in the web

# Reiner Mathar from SUPPORT presented CO₂nnect

The internet-based ESD tool " $CO_2$ nnect:  $CO_2$  on the way to school" was launched in spring 2009 as part of the EU Comenius Lifelong Learning network project "SUPPORT: Partnership and participation for a sustainable tomorrow". The  $CO_2$ nnect activities are designed to support learning that can provide pupils with abilities, skills, attitudes and awareness as well as knowledge and understanding to meet the challenges of sustainable development - including climate change.  $CO_2$ nnect offers schools an international, internet-based learning activity and guidance materials about ESD. Schools, researchers and actors in the local community collaborate on the theme of reducing  $CO_2$  emissions from local transportation.  $CO_2$ nnect is intended to help teachers to provide high quality ESD without taking ownership of the educational activities from them. Rather than providing a "ready teaching package," the tool is meant to help teachers with their work of constructing educational arenas and activities for (and with) their pupils.  $CO_2$ nnect was opened for use March 2009 and will be available for at least

two more years. It includes a calculator for CO<sub>2</sub> from transport, a database for the results, analysis tools, pupil questionnaires, more than 50 pages of guidance materials for teachers and an evaluation module. A few features such as "ask an expert" have a more limited time frame. Key pages are translated into 17 languages. More than 50.000 pupils in 30 countries have registered their CO<sub>2</sub> emissions from school transport and many have carried out local projects on sustainable transport. Approximately 300 teachers have submitted an online evaluation.



Fig. 3: CO<sub>2</sub>nnect in the web

# Development work funded by SUPPORT led to the presentation of the educational software PRONAS. The project PRONAS - Projections of Nature for Schools (<a href="www.pronas.ufz.de">www.pronas.ufz.de</a>) — addresses the interface between science and education. Results of biodiversity research — in particular of the Integrated Project ALARM (<a href="www.alarmproject.net">www.alarmproject.net</a>) have been made available for school students in educational software which is freely accessible via the Internet. The program brings into focus the topics Climate change, Pollinators, Invasive species and Environmental chemicals. Projections of potential future distributions of hundreds of species living in Europe are presented and explained for the three basis scenarios SEDG (Sustainable European Development Goal), BAMBU (Business As Might Be Usual) and GRAS (GRowth

Applied Strategy). These projections have been calculated for the time period until 2100. The educational software will include user interfaces for habitat modelling. Project partners are

researchers, educators from environmental visitor centres and schools.

The internet educational software PRONAS was demonstrated by Karin Ulbrich



Fig. 4: PRONAS in the web

#### 3.3 Hands-on trials of the ICT tools

Workshop participants tested all of the presented ICT programmes in a special session. An appropriate computer room with 20 computers was provided by the conference hotel.

The hands-on activities had been specified by the representatives who had given the presentation. Typical trials tasks were

- EOL: search for given species and specific information, understand the structure of the ICT
- ❖ NatureGate: identify plant species with the species-identifying tool
- ❖ CO₂nnect: become acquainted with the goals and the functioning of the website; read the results
- PRONAS: understand the scenario approach; become familiar with the projections; answer test questions

The feedback of participants was positive and constructive, and many of them intended to apply the ICT in their educational work. An exceptional result was the successful networking between the ICT presenters themselves. They intend to start or strengthen collaboration.

### 3.4 Additional examples and inputs

Students from the Friedrichs-Gymnasium Kassel

Four students from the Friedrichs-Gymnasium Kassel presented projects derived from their school year's main topics "Genetics" and "Ecology" with special examples in fauna and flora of their home region, such as wolves in Germany, the German Crayfish, "GM-corn", the raccoon, and the so called "Gespinst"- moth (see the summary in the appendix).

Very interesting input was given by representatives of natural museums and visitor centres.

 Jiska Verbouw from the Natural Museum Brussels spoke about Projects for the Year of Biodiversity 2010.

Examples for projects in Research and policy are

- ✓ Expedition 'Congo river 2010' (media coverage)
- ✓ Register of Belgian species
- √ 10th conference of the Parties of the CBD (Japan)
- ✓ Assembly 'Future visions for biodiversity'

Examples for projects in General public & schools

- ✓ New Biodiversity Galleries
- ✓ 2010: 'Biodiversity in the City'
- √ 'Managing your own city'
- ✓ Brand new approach
- ✓ 2 more galleries in 2011 and 2012: 'Ever-changing nature' / Ecosystems / Relationship mannature

Examples for projects for Schools outside the Museum: Travelling exhibition

- ✓ 'Biodiversity in the City'
- ✓ Touring in Brussels for 2 years
- Sandra Diris (Provinciaal Natuurcentrum Genk, Belgium) presented the talk "Biodiversity in Limburg, a story of our schools"

Sustainability and halting the loss of biodiversity are two central themes (key issues) of the environmental and nature policy of the province of Limburg. To reach set targets Nature and Environment Education (NEE) is used as an important tool. Informing people (especially young people) and giving them insight in the effects of their behaviour on the environment will stimulate them to use natural resources in a sustainable way. With the project Environmental Care at Schools (EC@S) the province assists schools that wish to develop a Nature and Environmental Education programme (NEE). EC@S is an initiative of the Flemish government, stimulating nursery, primary and secondary schools as well as higher education institutions to develop their own Environmental Care programme in a pedagogical way.

- Sabine Lavorel from INRP (National Institut of Pedagogical Research, France) addressed the objectives and outcomes of the project Graines d'Explorateurs:
  - Capitalize on the experience of accompanying the SANTO scientific expedition
  - Participate in education for citizenship through the issues of biodiversity study
  - Develop scientific literacy and provide an appetite for science among secondary students
  - Translate accompanying pedagogical approach in terms of engineering and expertise to enable similar projects
    - She presented educational tools proposed by the INRP: online scientific resources, teaching and learning on the website <a href="http://acces.inrp.fr/evolution/graines">http://acces.inrp.fr/evolution/graines</a>. They are
    - A forum for teachers to have quick answers to their scientific and pedagogical questions
    - methodological and practical documents and library resources

 Helga Spitzer and Josef Gröber, Ökolog network, shared their experience with the Austrian network.

ÖKOLOG is the first and the main program for schools at the interface of Environmental Education and school development. It is based on the ENSI approach to ESD taking account the challenges and opportunities of school autonomy and school program development. Schools define ecological, technical and social conditions of their environment. This is the basis for their concrete activities. Students, teachers and parents are being involved in a participatory way. Collaboration with authorities, business firms and NGOs should be encouraged.

The visit to the Wassererlebnishaus" (Centre of environmental education and out of classroom learning (<a href="http://www.wassererlebnishaus-fuldatal.de/">http://www.wassererlebnishaus-fuldatal.de/</a>) was one of the workshop highlights. The group enjoyed the nice location and equipment of the centre and the good atmosphere.



Fig. 5a: Visit to the "Wassererlebnishaus"



Fig. 5b: Model of waste treatment

• *The poster exhibition* included more than 15 posters from many participants. It was an appropriate basis for bilateral talks, discussions and for sharing experience.



Fig. 6a: A poster describing the BEAGLE project (www.beagle.org)



Fig. 6b: A biodiversity project from Slovakia



Fig. 7: The winner of the Photo award was Jiska Verbouw (Belgium)

### 3.5 Group work

Much of the seminar was devoted to interaction, discussion and exchange of experience among the participants. This was structured as a series of 4 rounds of group work:

- Getting acquainted by presenting an example from own country and reflection on why it was a good example of biodiversity education
- SWOT analysis of biodiversity education in the context of ESD
- Discussing the 4 themes
  - o School-research cooperation reflect on experiences -
  - o in and out of classroom learning
  - o ICT in school lessons,
  - Use of museums, central parks, zoos.
- The way forward how to improve Biodiversity education for ESD?

Group work showed that there was a general consensus among participants about the crucial role of biodiversity education in ESD. Intensive discussions emerged from the great variability in approaches and projects and forms of collaboration. A summary of the discussion is given in the following paragraphs, the detailed protocol is enclosed in the appendix.

### (1) Examples from own countries, Where are we now - Introducing each other

Each participant was asked to say a little about themselves and their work – stressing what they see as the best thing they have done in biodiversity education /research and what made it the best thing. They commented on how much their biodiversity education is also ESD. National examples

ranged from "Biodiversity in winter" (Finland) via "Collecting olives" (Spain), "Creating an eco-park" (Slovakia) up to the "Year of the Gorilla" (Romania). Bird monitoring (Hungary) and biochemical measurements at river sites (Finland) as well as the creation of a nature trail on wild bees (Germany) were successful examples of biodiversity projects. Multi-faceted presentations created an excellent basis for getting to know each other and for sharing basic ideas.



Fig. 8: First session of working groups

# (2) SWOT analysis of biodiversity education in the context of ESD

The groups reviewed the strengths, weaknesses, opportunities and threats associated with biodiversity education. Participants came to the conclusion that following aspects are problematic:

- Structure of schools and curricula give little space for biodiversity education
- Little support by policy
- Lack of money, materials, time
- Going out to nature is a problem for many teachers
- Getting information in English is a problem for many teachers
- Understanding of the complexity might be a problem
- Different values what to protect, sometimes contradictory
- Poor collaboration with the families
- Bureaucracy
- ➤ ESD competes with other topics big pressure on teachers

### Chances and opportunities have been mentioned as follows:

- Make people to feel the necessity to be in contact with the nature and to feel as a part of this nature
- Collaboration and discussion between scientists, teachers, and students
- Innovation of teaching (Out of the box thinking)
- Can be part of every subject
- > Relevant topic in every day life
- People want to do the right thing



Fig. 9: Working group with participants from Belgium, UK, Finland, Germany

### (3) What support is needed and where are the barriers - discussing

- School-research cooperation reflect on experiences -
- in and out of classroom learning
- ICT in school lessons,
- Use of museums, central parks, zoos.

Working groups looked at these themes and discussed how they would like to see each to support biodiversity education and ESD over the next five years – a vision for the contribution of each area to biodiversity education. The groups also discussed what support they need to help them achieve their vision, what barriers they might face and how they might overcome these.

Barriers for School-research cooperation are

- Level of knowledge
- Language
- Teachers are afraid of using computers and new technologies
- Geographic barriers
- > Time management
- Sort out complex issues
- Financial budget
- No pedagogical training (scientists)
- School type
- Lack of confidence (teacher)
- Lack of recognition (scientist)



Fig. 9: Working group discussion on action plans

### Ways to overcome these barriers are

- Create a system for teachers to find experts
- Change the award system for experts
- Ask in time for support
- Improve project management and project coordination
- > Key persons responsible for collaboration
- Organize training courses for using new technologies
- Training courses for language (English!)

Results for Out of Classroom Learning, ICT use and using museums, zoos and other external resources are given in the appendix.

### (4) The way forward – how to improve Biodiversity education for ESD?

This was an action planning session and the members of the groups spent some time working individually to say what they aim to achieve as an individual and then in their schools and institutions as a result of the workshop. They then shared their action plans in their groups and created a joint presentation for the following day.

Examples of planned actions are given on Figure 10.

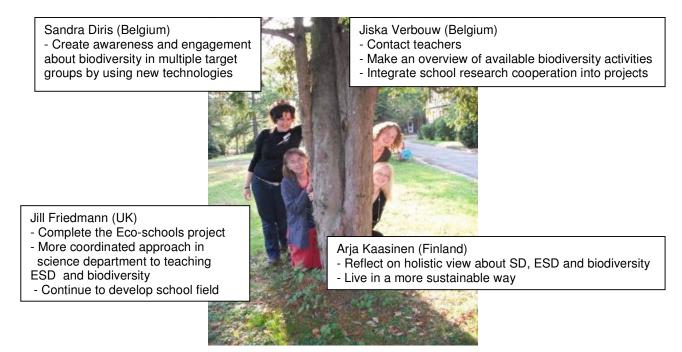


Fig. 10: Outcome of the discussion

### 5. Conclusions

The most important lesson coming out of the seminar confirmed that it was fruitful to bring together people from science and education. We have learned that biodiversity education is an inseparable part of ESD as there are many direct and indirect connections between them. Participants had an excellent opportunity to complete their knowledge about external sources such museums, zoos, and visitor centres. They agreed that ICT should be used much more intensively and that it is necessary to strive for modern computer equipment of schools all over Europe. Workshop participants were concordant with the ambition of organising another Biodiversity workshop in 2 years.

# **Appendix**

- 1 Program
- 2 List of participants
- 3 Overview of ICT tools for Biodiv education and ESD presented and tried
- 4 Students' report from Friedrichs-Gymnasium Kassel
- 5 Posters from the introduction session
- 6 Posters from the SWOT session
- 7 Posters from "What support is needed and where are the barriers?"
- 8 Posters on the Action plans session
- 9 Group discussions: Content of the posters

Thurse	day, 24 September 09
13:00	Arrival
18:00	Welcome addresses
	Presentations of students
19:00	Dinner buffet
20:00	Exhibition opening
Friday	, 25 September 09
9:00	The spirit of teaching ESD – Biodiversity in educational projects
	Prof. Dr. Armin Lude, University of Education Ludwigsburg, Germany
9:45	ScienceAcross – the Network for teachers and students
	Stud.dir. Egbert Weisheit, Friedrichsgymnasium Kassel, Germany
10:30	Coffee break
10:45	ALARM for biodiversity –results of European research projects
	Dr. Oliver Schweiger, Helmholtz Centre for Environmental Research-UFZ, Germany
11:30	Introduction into working groups
	Margaret Fleming, MF Associates, UK
12.00	Working groups I
12.30	Lunch
14:00	Working groups I (Continue)
15:00	Coffee break
15:15	Presentation of Internet-based Educational software
	NatureGate
	Arja Kaasinen, University of Helsinki, Finland
16:00	PRONAS – Projections of Nature for Schools
	Karin Ulbrich, Helmholtz Centre for Environmental Research-UFZ, Germany
16:45	Visit to the Wasser-Erlebnishaus (Out of classroom learning about water)
19:00	Dinner
20:00	Trying out educational software at computers
Saturo	lay, 26 September 09
9:00	CO <sub>2</sub> nnect
	Reiner Mathar, SUPPORT
9:45	Encyclopedia of Life – discovery, interaction, participation
	Marie Studer, Harvard University, Museum of Comparative Zoology, USA
10:30	Projects for the Year of Biodiversity 2010
	Jiska Verbouw, Natural Museum Brussels, Belgium
10:45	Coffee break
11:00	Trying out and discussing EOL educational tools (Group I)
	Discussing implementation of museums, zoos etc. in biodiversity education (Group II)
11.45	Discussing implementation of museums, zoos etc. in biodiversity education (Group I)

1 Program

	Trying out and discussing EOL educational tools (Group II)
12:30	Lunch
14:00	Biodiversity in Limburg, a story of our schools
	Sandra Diris, Provinciaal Natuurcentrum Genk, Belgium
14:20	Working groups 2
16:00	Working groups 2 (Continue)
17:00	Plenary
17:30	Working groups 3
19:00	Dinner
20:00	Trip to Kassel
Sunda	y 27 September
9:00	Presentation of working groups
9:50	Achieving the learning outcomes of education for sustainable development through school
	research collaboration and ICT: what have we learned from SUPPORT?
	Reiner Mathar, SUPPORT
10:10	A National Experiment in Research/Education collaboration
	Sabine Lavorel, ACCES / National Institut of Pedagogical Research, France
11:00	Photo Award
11.10	Summary and Workshop book
12:00	Lunch
13	:00 Departure

# 2 List of participants

<b>Name</b> Bistová Sonia	Institution Primary school Dr. Janského no2	Role Teacher	<b>Country</b> Slovakia
Bohanek Katalin	Hungarian Society for Environmental Education	Teacher educator	Hungary
Cera Alba	CEIP SANTA CREU, Anglesola (Catalonia)	Teacher	Spain
Diris Sandra	Provinciaal Natuurcentrum, Domein Bokrijk, Gent	Environmental educator	Belgium
Domokos Erzsebet	Gimnaziul "Alexandru Ioan Cuza", Târgu Mureş	Teacher, teacher educator	Romania
Fleming Margaret	MF Associates	Environmental educator	UK
Friedmann Jill	Thomas Estley Community College, Leicester	Teacher	UK
Gröber Josef	ARGE-ÖKOLOG, Kärnten	Senior teacher	Austria
Grunert Janina	Studienseminar Magdeburg	Teacher trainee	Germany
Horvath Ferenc	Intitute of Ecology and Biology, Hung. Academy of Sciences	Scientist	Hungary
Kaasinen Arja	University of Helsinki	PhD	Finland
Kunto Terhi	Hönttämäki primary school, Oulu	Teacher	Finland
Lavorel Sabine	National Institut of Pedagogy Research in Lyon	Teacher, researcher (pedagogy)	France
Lude Armin	University of Education Ludwigsburg	Professor	Germany
Mathar Reiner	Institute for Teacher Education Giessen	Teacher educator	Germany
Molnar Zsolt	Intitute of Ecology and Biology, Hung. Academy of Science	Scientist	Hungary
Mustonen Outi	Timosenkoski Nature School, Oulu	Teacher	Finland
Perez Barbara	CEIP SANTA CREU, Anglesola (Catalonia)	Headmaster	Spain
Rosenbergova Zuzana	Primary school Dr. Janského no2	Teacher	Slovakia
Schmidt Carola Schweiger Oliver	Studienseminar Kassel Helmholtz Centre for Environmental Research- UFZ	Trainee teacher Scientist	Germany Germany
Spitzer Helga	ARGE-ÖKOLOG, Kärnten	Headmaster	Austria
Studer Marie	Harvard University, Museum of Comparative Zoology	Education and outreach director	USA
Taratsa Asimina	1st Lykion of Agia Paraskevi – Athens	Teacher	Greece
Ulbrich Karin	Helmholtz Centre for Environmental Research- UFZ	Scientist	Germany
Vasiliev Dosi	National park Kellerwald- Edersee	Environmental educator	Bulgaria
Verbouw Jiska	Natural Museum Brussels	Science	Belgium

		communicator	
Weisheit Egbert	Studienseminar Kassel	Head teacher	Germany
Di Giacomo Raphael	Friedrichsgymnasium Kassel	Student	Germany
Bock Klas	Friedrichsgymnasium Kassel	Student	Germany
Klann Christian	Friedrichsgymnasium Kassel	Student	Germany
Öz Denis	Friedrichsgymnasium Kassel	Student	Germany

#### 3 Overview of ICT tools for Biodiv education and ESD demonstrated

Name	Web address	Presented by
Encyclopaedia of Life (EOL)	www.eol.org	Marie Studer
NatureGate	www.luontoportti.com/suomi/en/	Arja Kaasinen
CO₂nnect	co2nnect.org	Reiner Mathar
Projections of Nature for Schools (PRONAS)	www.pronas.ufz.de	Karin Ulbrich

### 4 Students' report from the Friedrichsgymnasium Kassel

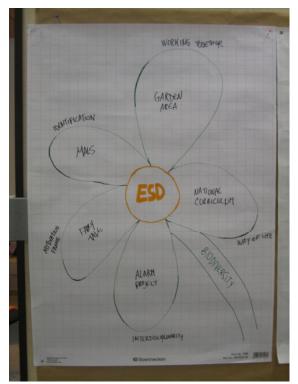
We had several projects concerning our school year's main topics "Genetics" and "Ecology" with special examples in fauna and flora of our region, such as wolves in Germany, the German Crayfish, "GM-corn", the raccoon, the so called "Gespinst"- moth and the "Benjes"-hedge. First group researched about wolves in Germany, actually just one, the one, that has been sighted one year ago. He is baptized "Reinhard", because he has been seen firstly in the "Reinhardswald", and he is a loner from a pack in Poland. On this example, scientists got the affirmation to their theories on the behavior of wolves in extreme situations, e.g. they are able to accommodate themselves to foreign regions and they even eat plants to get their vitamins and the wolf rate in Europe even rises. Next group made some investigations about the German Crayfish. They found out, that this little shellfish already lived all around Europe, until the industrialization came; it made their water dirty (this animal needs clean water) and there was another incident which endangered their existence, another shellfish introduced from America is responsible for the decrease of the number of German Crayfish, only in the South of Germany some Crayfishes were able to stay competing with the intruder. Third group gave a report about genetically modified corn. The U.S. company Monsanto wanted to cultivate seeds of their GM corn on fields nearby Kassel. This lead to protesting farmers, because they counted their job as endangered. So as a result the German agrarian minister Ilse Aigner forbade Monsanto's idea of crop-growing. The group also contacted Dietmar Groß, leader of the initiative "No genetically manipulated in the Schwalm-Eder region". He appeals students to discuss this topic in school.

Forth group searched for some facts about the German raccoon, e.g. that it is an omnivore and therefore it searches for food especially in composts and other waste disposals which include food. So they have become very besetting and as a consequence of this fact and that they are very intelligent and artful it is very difficult to show them.

### 5 Posters from the introductory session



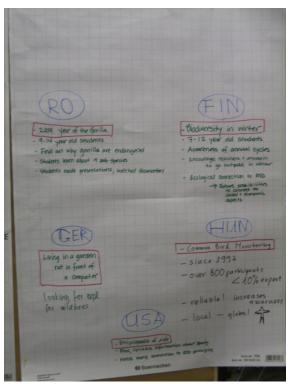
Poster 5.1



Poster 5.3 Poster 5.4



Poster 5.2

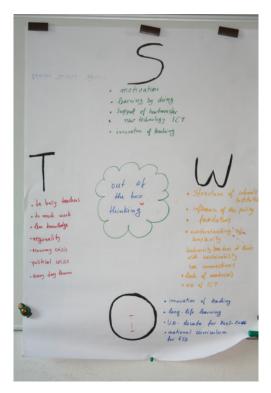


# 7 Posters from the SWOT session





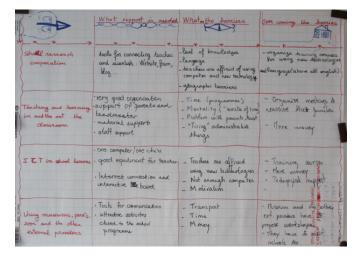
Poster 6.1



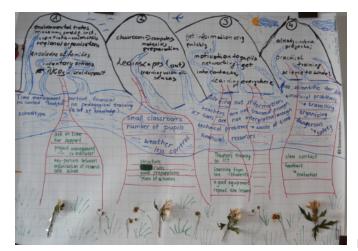
Poster 6.3

Poster 6.2

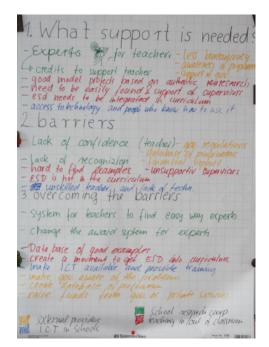
### 8 Posters on "What support is needed and where are the barriers?"



Poster 7.1



Poster 7.2

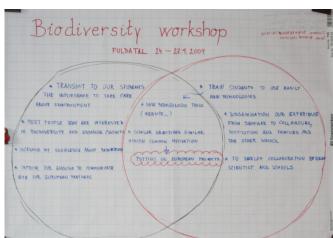


Poster 7.3

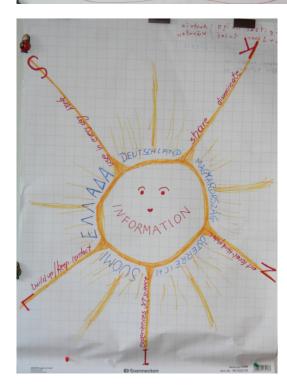
### 9 Posters on Activity plans



Poster 8.1



Poster 8.2



Poster 8.3

### 10 Group discussion: Content of the posters

# I. Arja Kaasinen (Finland), Armin Lude (temp.), Oliver Schweiger (temp.) (Germany), Sandra Diris, Jiska Verbouw (temp.) (Belgium), Jill Friedman (UK)

# Introductory session

- > Identification tools
- ➤ Garden area
- > National curriculum
- ➤ ALARM project
- Motivating frame: Fairy tales

# II. Barbara Torres, Alba Cera (Spain), Sabine Lavorel (France), Zuzana Rosenbergova, Sonia Bistova (Slovakia)

# Introductory session

Spain: Collecting olives (2008)

- ➤ Pupils from 3 to 12
- > Importance of our olive trees
- > Past, present future

Slovakia: Creating of an eco-park (2007 – 2009)

- Pupils 8 to 14
- ➤ Biodiversity of plants in our region
- Plant seed

### France: local scientist expedition

- > Studying biodiversity of the river
- ≥ 2 years: 1<sup>st</sup> expedition, 2<sup>nd</sup> analysing data, presentation of the results, website, meetings ...
- Scientist partners: University Lyon/INRP, National History museum Paris
- > Pupils from 11 to 13

### **SWOT** session

# Strength:

### Weaknesses:

- > Poor collaboration of the families
- > Teachers are afraid of going to nature
- > Teachers are afraid of looking for information in foreign languages

### Opportunities:

- Make people to feel the necessity to be in contact with the nature and to feel as a part of this nature
- > Collaboration and discussion between scientists, teachers, and students

### Threats:

Maybe some people could think that these projects are not important

# What support is needed, and where are the barriers?

	What support is needed	Where are the barriers	How to overcome the barriers
School-research cooperation	Tools for connecting teachers and scientists: website, forum, blog	<ul> <li>Level of knowledge</li> <li>Language</li> <li>Teachers are afraid of using computers and new technologies</li> <li>Geographic barriers</li> </ul>	<ul> <li>Organize training courses for using new technologies</li> <li>Training courses for language (English!)</li> </ul>
Teaching and learning in and out of the classroom	<ul> <li>Very good organisation</li> <li>Support of parents and head master</li> <li>Material support</li> <li>Staff support</li> </ul>	<ul> <li>Time (programs)</li> <li>Mentality ("waste of time")</li> <li>Problems with parents' trust</li> <li>"Tiring" administrative things</li> </ul>	<ul> <li>Organize meetings to reassure the families</li> <li>More money</li> </ul>
ICT in school lessons	<ul> <li>One computer per child</li> <li>Good equipment for teachers</li> <li>Internet connection</li> <li>Interactive board</li> </ul>	<ul> <li>Teachers are afraid of using new technologies</li> <li>Not enough computers</li> <li>motivation</li> </ul>	<ul><li>Training courses</li><li>More money</li><li>Pedagogical support</li></ul>
Using museums, parks, zoos and other external providers	<ul> <li>Tools for communication</li> <li>Attractive activities</li> <li>Close to the school program</li> </ul>	<ul><li>Transport</li><li>Time</li><li>Money</li></ul>	<ul> <li>Museums and the other external providers should organize workshops</li> <li>They have to visit schools too</li> </ul>

# Action plans

- Transmit to our students the importance to take care for the environment
- Meet people who are interested in biodiversity and exchange contacts
- Increase my knowledge about biodiversity
- Improve our English to communicate with our European partners
- Train students to use easily new technologies
- Disseminate our experience from the seminar to colleagues, institutions, families, and other schools

### Conclusions:

- ➤ New pedagogic tools (website)
- ➤ Similar objectives similar vision common motivation
- > Putting on European projects

# III. Asimina Taratsa (Greece), Helga Spitzer, Josef Gröber (Austria), Ferenc Horvath, Kata Bohanek (Hungary), Terhi Kunto (Finland)

### Introductory session

### Finland:

- ➤ Dealing with projects exchanging experiences with other schools, nature schools
- Eco schools, schools interested in environmental education (EE)
- > Trip: history-meaning of the river
- > Biochemical measurements
- ➤ Collect plants taxonomy
- ➤ Nature art

### Hungary:

- > Survey of ecosystem diversity
- Transform the results to ESD
- > Forest schools in education

#### Greece:

- > Schools follow EE projects
- Example: EE project about forest, trip to Central Greece
- ➤ Observed: that are hybried: Abies cefalonica \* Abies alba which grows between 800m to 1600m, moves higher (900 1000m) due to climate change
- There are institutions and special environmental centres which support the EE projects
- ➤ No funding of teachers

### Austria:

- Eco schools linked in network
- > School programs dealing with EE funded by government: (1) UNESCO work for ESD, (2) collaboration with institutions and NGOs

### SWOT session: Out of the box thinking

# Strength:

- Motivation
- > Learning by doing
- > Support of headmaster
- ➤ New technology ICT
- > Innovation of teaching

### Weaknesses:

- > Structure of schools and institutions
- > Influence of the policy
- > Funding
- > Understanding of complexity
- ➤ Biodiversity: how does it link with sustainability
- ➤ Lack of materials
- ➤ Use of ICT

# Opportunities:

- > Innovation of teaching
- ➤ Long-life learning
- ➤ UN-decade for 2005 2014
- > National curriculum for ESD

### Threats:

- > Too busy teachers
- > Too much work
- ➤ Less knowledge

- Regionality
- Economy crisis
- Political crisis
- > Every day lessons

What support is needed, and where are the barriers?

	What support is needed	Where are the barriers	How to overcome the barriers
School-research cooperation	<ul> <li>Environmental centres, museums, pedagogical institutions, scientist, universities, regional organisations</li> <li>Knowledge of families</li> <li>Voluntary activities</li> <li>NGOs-local support</li> </ul>	<ul> <li>Time management</li> <li>Sort out</li> <li>Financial budget</li> <li>No pedagogical training (scientists)</li> <li>School type</li> </ul>	<ul> <li>Ask in time for support</li> <li>Project management and project coordinator</li> <li>Key persons responsible for collaboration</li> </ul>
Teaching and learning in and out of the classroom	<ul> <li>Computers to the classroom</li> <li>Preparation of materials</li> <li>Learning with all senses</li> </ul>	<ul> <li>Small classrooms</li> <li>High number of pupils</li> <li>Weather</li> <li>Less control</li> </ul>	Structure Rules Good preparation Plans of activities
ICT in school lessons	<ul> <li>Get information very quickly</li> <li>Motivation of pupils</li> <li>Networking</li> <li>Learning everywhere</li> </ul>	<ul> <li>Sorting out information</li> <li>Teachers are not trained enough</li> <li>ICT are not integrated enough</li> <li>Technical problems lead to waste of time</li> <li>Financial resources</li> </ul>	<ul> <li>Teachers training on ICT</li> <li>Learning from the students</li> <li>A good equipment</li> <li>Repeat the lessons</li> </ul>
Using museums, parks, zoos and other external providers	Already working projects Practical training Science to school	<ul> <li>Too scientific for kids</li> <li>Financial problems (travelling)</li> <li>Organising</li> <li>Dangerous → safety</li> </ul>	Close contact Feedback → evaluation

# Action plans

- Share, disseminate experience
- Act local, think global
- Use in everyday work
- Experience, ICT, science
- Build up, keep contact

# IV. Carola Schmidt, Janina Grunert (Germany), Marie Studer (USA), Erzsebet Domokos (Romania), Zsolt Molnar (Hungary), Outi Mustonen (Finland)

### Introductory session

Romania: 2009 - year of the Gorilla

- > 9 to 14 year old students
- > Find out why gorillas are endangered
- > Students learn about 4 subspecies
- > Presentations, documentary

### Finland: Biodiversity in winter

- > 7 to 12 year old students
- > Awareness of annual cycles
- > Encourage teachers and students to go outside in winter
- Ecological connection to ESD future possibilities to connect to social and economic aspects

### Hungary: Common bird monitoring

- ➤ Since 1997
- ➤ More than 800 participants (<10% experts)
- > Reliable, increases awareness

### USA: Encyclopedia of Life

- > Free, reliable information about species
- ➤ Needs more connection to ESD principles

### Germany: Nature trail about bees

- Living in a garden, not in front of a computer
- ➤ Looking for wild bees (as an example)

### **SWOT** session

### Strength:

- ➤ Local, easy access
- > Can be included in every subject
- ➤ Humans are naturally curious about nature

### Weaknesses:

- > Depending on individuals
- > Teacher can be hypocritical
- > Different values, want to protect different things
- ➤ Afraid of nature easy life in artificial world
- Isolated projects

### Opportunities:

- Collaboration
- > Can be part of every subject
- > Relevant topic in every day life
- > People want to do the right thing

#### Threats:

- Bureaucracy
- Lack of authentic work
- > ESD competes with other required topics

# What support is needed, and where are the barriers?

	What support is needed	Where are the barriers	How to overcome the barriers
School-research cooperation	<ul><li>Experts for teachers</li><li>Credits to support teachers</li></ul>	Lack of confidence (teacher) Lack of recognition	System for teachers to find experts Change the award system for experts
Teaching and learning in and out of the classroom	<ul> <li>Good model projects based on authentic research</li> <li>Need to be easily found &amp; support of supervisors</li> <li>ESD needs to be integrated in curriculum</li> </ul>	<ul> <li>Hard to find examples</li> <li>ESD is not in the curriculum</li> <li>Unsupportive supervisors</li> </ul>	Data base of good examples Create a movement to get ESD into curricula
ICT in school lessons	Access to technology and people who know how to use it	<ul><li>Unskilled teachers</li><li>Lack of technical equipment</li></ul>	<ul><li>Make ICT available</li><li>Provide training</li></ul>
Using museums, parks, zoos and other external providers	<ul> <li>Less bureaucracy</li> <li>Awareness of programmes</li> <li>Support of government</li> </ul>	<ul> <li>Governmental regulations</li> <li>Database of programs</li> <li>Financial support</li> </ul>	Make government aware of the problem Create database of programs Raise funds from public or private sources

# Action plans

# Finland

- Opportunities for cooperation with scientists
- Take info's to other schools

# Hungary

- Grandparents at school
- Landscape diversity

### USA

- Keep contact with the network
- Make EOL easily available
- Coordinate the projects

### Romania

- Environmental club
- Organize a competition for pupils about biodiversity
- ICT in lessons
- Roundtable for the Romanian schools
- Keep in touch with the workshop participants

# Germany

- ICT in lessons (CO2nnect!)
- Talking with colleagues
- In curriculum
- A person who is responsible for ICT