

## **Successful implementation of sustainability in schools in North Rhine Westfalia through professional support\***

(Tilman Langner, consultant of the Düsseldorf network “accomplishment for sustainable development, environment and sustainability audit in schools”)

### **Introduction**

Welcome ladies and gentlemen,

I thank you heartily for the invitation to this Finnish-German experience exchange! I am so happy to have the opportunity to visit local schools and to be able to have discussions with experts. Also I would like to provide an active contribution to this seminar.

My name is Tilman Langner, I currently live across from the Baltic Sea in north east Germany. I work as a freelancer and bring, in addition to my services, the ability to make environmental education projects real in both schools and in non profit organisations. I help to prepare projects and to acquire development funds, I advise teachers, develop materials for environmental education and facilitate educational environmental projects in public relations.

For many years there have been two questions at the forefront of my interest:

- How can we implement environmental protection and sustainable development in schools? This is the subject of our seminar, and about which I would like to speak as an advisor for the Düsseldorf network “Education for sustainable development”.
- How can we enrich didactics and methodics of environmental education with new media? – For this purpose I have brought a leaflet with me which introduces a project I have contributed to in recent years ([www.freeyourriver.net](http://www.freeyourriver.net))

My colleague Klaus Kurtz has just presented how Düsseldorf schools can implement sustainability. Which type of support and advice in doing so do the schools respectively need? I would like to go through the following aspects in my lecture:

- Further education and exchange
- Structures for the continuous improvement process
- The development of management tools
- (Educational) Political safeguards
- Communication, public feedback
- Money

I will outline for each of these aspects, why in my opinion each is important, how it is being implemented in the Düsseldorf network, and which results can be shown.

\*This is the paper-version of a lecture at the Finnish-German Cooperation Seminar “Sustainability in Schools” in Helsinki, 2007-04-03, for more details see [www.umweltschulen.de/audit/duesseldorf/finnland.html](http://www.umweltschulen.de/audit/duesseldorf/finnland.html)

## **Further education and exchange/intercommunication**

### **Why?**

Many of the schools in the Düsseldorf network have been committed to environmental education for a long time. With the guidance of the model of sustainability, they have considerably enlarged their horizons. With Eco, and or sustainability audits they use modern management instruments from industry. With education for sustainability development, they have opened up a new educational concept.

The implementation of sustainability is thus a very large challenge for every single school. It is therefore helpful for teachers, if they acquire further training, in which they can motivate and learn from one another.

### **How?**

The members of the Düsseldorf network meet in 4-5 sessions a year. In which organisational matters are negotiated; however the meetings predominantly serve as further training and as an exchange between members. We visit each school in turn and are informed about their projects. Delegates of the economy or the city administration appear as speakers. The sessions are prepared, led and also recorded by the project coordinator, Mr Kurtz.

Further training days have also been arranged for special topics, such as for project management and the software for surveys -GrafStat, which will play a role in my contribution this afternoon. A training session on the theme of evaluation is being prepared for the next school year.

We have carried out congresses of about the subject sustainable development as well as mass-methods.

In addition, the members of the further education network visit other places and then report about them at the meetings. So it is, for example that in May 2006 an EMAS conference took place in Vienna, so we will also report about this trip.

And ultimately the teachers within the network act as advisors to other schools, because we support the objective, of implementing education for sustainability development in many schools as possible in Germany.

### **With which results?**

The members of the Düsseldorf network can familiarise themselves with the model of sustainable development, they can acquire methodical know-how and establish these in their schools. About which Klaus Kurtz has extensively reported.

As members of this network we can acquire insight into exceptionally interesting projects of schools. I have for example, got to know about and to cherish the following projects:

- The Togo project of the Agnes-Miegel-Realschule
- The SALZ project (Social work and learn centre) for the reduction of class disturbances at the Fritz-Henkel-School
- The Toilet project at the Dieter-Forte comprehensive school.

Furthermore bilateral co-operations between schools have also been established, as for example, between the Hulda-Pankok-Gesamtschule and the Geschwister-Scholl-Gymnasiums. The Gymnasium advises the Gesamtschule on the theme of pupil led companies, and the Gesamtschule advises the Gymnasium on school garden work.

### **Structures for the continuous improvement process**

#### **Why?**

From my experience there are teachers at many schools who do a great deal for environmental protection. However other teachers and the pupils often only see this environmental protection as a private interest of these teachers. But if we want to implement environmental protection or more comprehensive examples of sustainability in schools, then it is a task for the whole school community, and everyone must participate.

We therefore need structures which make it possible that all members of the school community work together on these tasks in a useful way. And we should subdivide the development process into pieces.

If schools are supported at this, they can act in a target-orientated manner and avoid unnecessary detours.

#### **How?**

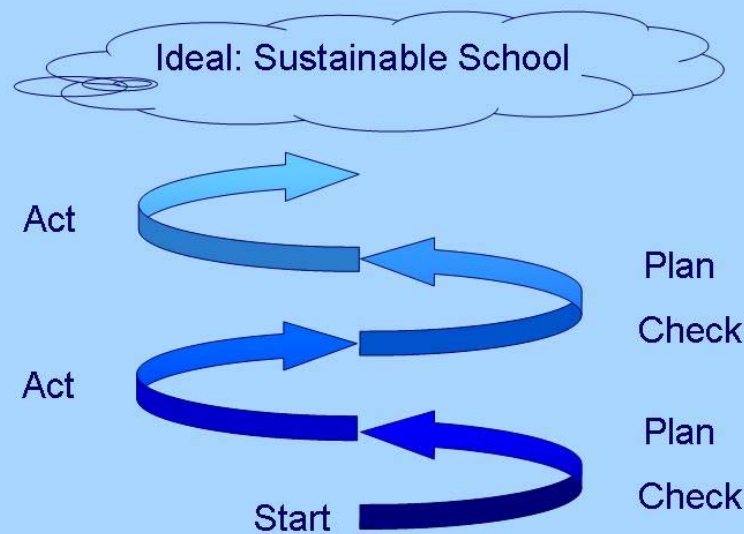
The schools in Düsseldorf orientate themselves with the development process within the model of EMAS. The EMAS prescription prescribes a mine of information of managerial know how of the management of development processes.

The schools are advised and supported by project leaders or by businesses like Henkel. I myself have guided schools on their audit processes for ten years. Schwerte comprehensive school, which I will report about this afternoon, was in 1997 one of the first schools in Germany to carry out an Eco- audit. There we adapted the EMAS prescription for school purposes and have at the same time notably simplified it. Since 1999, I have also advised schools in the Düsseldorf network.

#### **With which results?**

It was successful in the schools to construct individually and at the same time very efficient structures. The participants have significantly increased the effectiveness of their work. The discussion about the model (EMAS: environmental policy) is a fruitful clarification process internally in the school. The environmental controls add to a heightened self evaluation for the school. It is successful to incorporate different members of the school community specifically in both the development processes and in the management. Clear, defined aims and programmes give the process a clear structure to follow. Environmental or sustainability reports inform both the school community and general public.

## Structures for the continuous improv. process



EMAS helps to structure the continuous improvement process (very simplified scheme!).

In the process, most schools work with an adapted system which is very simplified in comparison to that of EMAS. Seven schools from the Düsseldorf network have implemented their Eco Sustainability audit in the style of EMAS.

One school followed their audit exactly according the EMAS prescription and in doing so also achieved their EMAS certification.

In the meantime four of these schools have since passed the audit process a second and even third time.

At different locations in Germany it is being discussed whether to award schools a special certification for their work, which should suit their situation better than EMAS. Klaus Kurtz has already talked about this.

You can find more information for schools about management systems in addition to the EMAS at: [www.umweltschulen.de/audit/managementsysteme.html](http://www.umweltschulen.de/audit/managementsysteme.html)

### **The development of management tools**

#### **Why?**

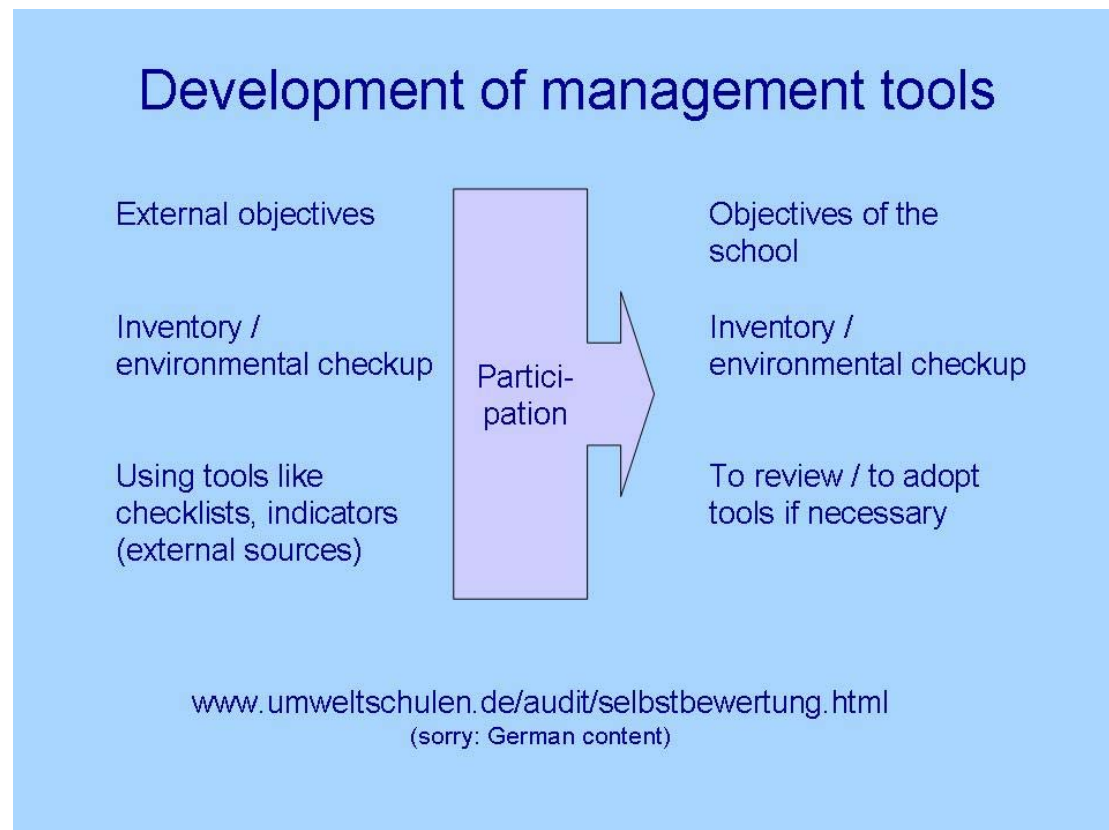
I understand under the term tools sequence plans, work materials, check lists and similar documents which the schools can use over and over again, in order to make their work easier and in order to ensure standards. If a school carries out the same environmental data checklists in successive years, the work will not only be more rational, but it will also assure a comparability of the data.

## How?

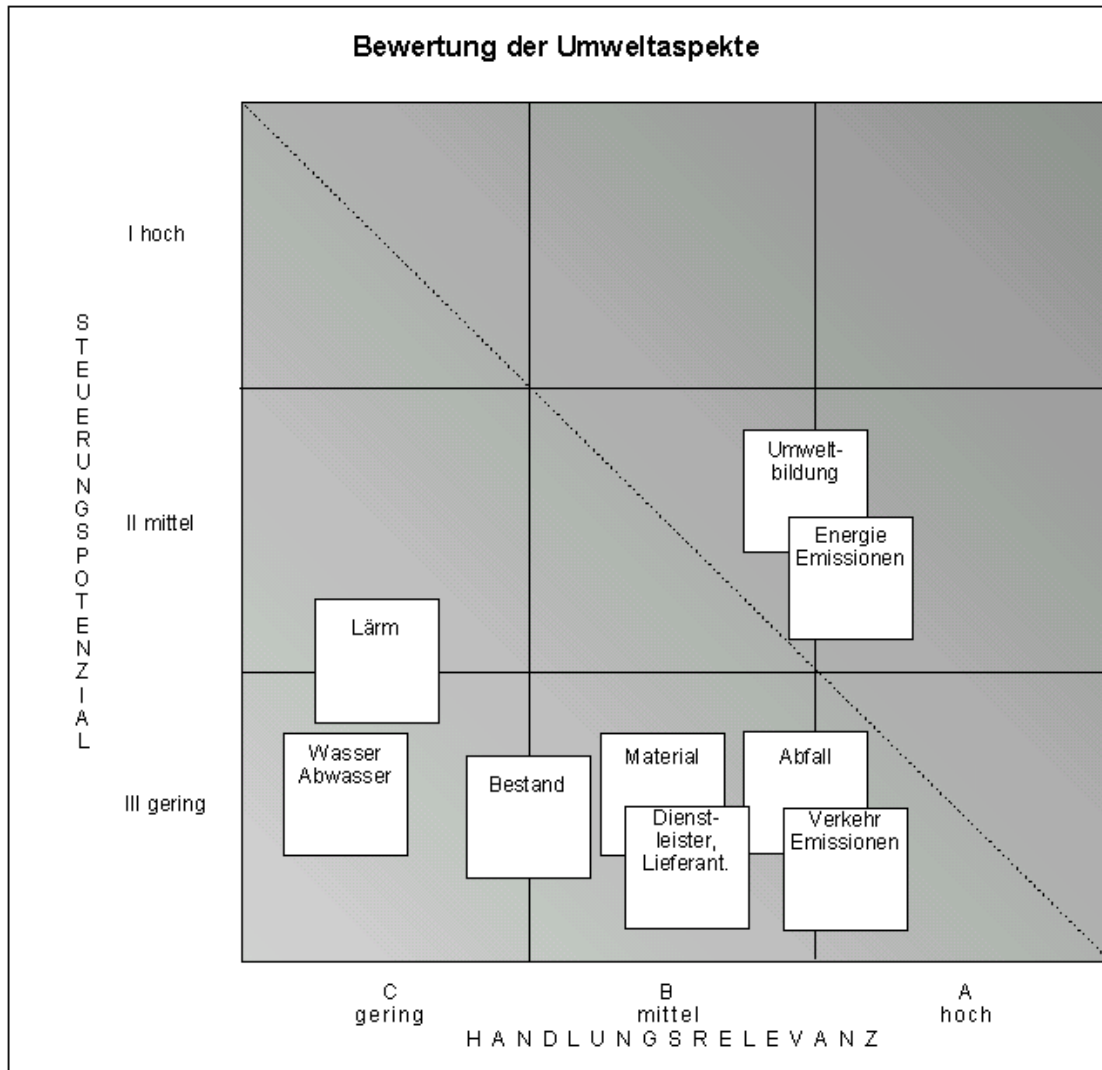
Instruments have been developed from different directions, advice, and organisations, which schools can use for their audit processes. These are not in the rule place bound, that is, that such instruments are useable in the whole of Germany.

## With which results?

For the inventory checklists, instruction sheets or characteristics can be used. (compare [www.umweltschulen.de/audit/selbstbewertung.html](http://www.umweltschulen.de/audit/selbstbewertung.html)) In my experience when such tools are used, it results in a clear decrease in schools' need for receiving advice in order to complete an environmental analysis. Although I co-invented these tools myself, I am now able to see them in a critical manner: every check list or every indicator already contains a predefinition of objectives (models), because only against the backdrop of objectives can concrete mass operations be specified. It is important that everyone participates in the development of sustainability, and therefore I wish to allow the schools the freedom to decide for themselves their own outlines and objectives. From there I point out to the schools, exactly how to examine, how far externally developed tools match their own models and objectives (see illustration).



I highly regard a matrix of examination which shows how relevant/fundamental certain environmental aspects are, which was developed by Neuss Berufskolleg (see following page).



Matrix of examination how relevant certain environmental aspects are from the viewpoint of Neuss Berufskolleg, see [www.umweltschulen.de/audit/neuss2006/umweltaspekte.htm](http://www.umweltschulen.de/audit/neuss2006/umweltaspekte.htm)

In the non ecological areas of sustainability there is, in my opinion, still demand for instruments inventory. The evaluation and educational process are currently at the forefront of the focus of the Düsseldorf network. We would like to help the schools, evaluate better than ever before, which outcomes – knowledge, approaches, and competences ultimately generate the implementation of sustainability in schools. A handout for this purpose is in the making.

Several schools have developed procedures, through which their pupils achieved the implementation of sustainability and in doing so acquired certification of competence. I myself have worked in the Bundesland of Schleswig-Holstein on the development of an environmental management certificate for learners, which has the same purpose.

## **(Educational) Political safeguards**

### **Why?**

Schools are confronted with a multitude of requirements. The educational political discussion plants ever more new emphases, for example school quality, education standards, lesson deficiency, the fight against violence in schools and school inspections. In the federal education system of Germany these demands can change after every state election. In addition to that many groups have an interest in this, such as the economy, universities as admitters of pupils or parents. At the same time the resources of the schools to fulfil these requirements are limited.

For demanding and long term invested schemes such as the integration of sustainability, it is absolutely necessary to ensure the relevant freedom for development.

### **How?**

The fundamental strategies consist of, presenting links to the current discussions, using the existing structures and in the best sense “to serve”. Also belonging to this purpose, is presenting the positive results, about which I will go into in detail on the next point.

At the local level of the Düsseldorf network is the project “Local Agenda 21”.

It is furthermore, bound to the model programme “Agenda 21 in school and youth work” of the Bundesland North Rhine Westfalia as well as the Germany-wide model programme BLK21/Transfer 21.

The schools in the network have on the one hand had luck, that they can use very helpful structures in their Bundesland capital Düsseldorf – not every school in Germany has the luck, that in their local authority districts a Local-Agenda 21 process exists or to have a branch of the BLK-model programme in their area. On the other hand it is the job of the project coordinator, which needs to be particularly appreciated and highly valued, to sustain and to expand the support structures for the network and with it to ensure free freedom for the schools.

### **With which results?**

The Düsseldorf network has worked solidly for 8 years – that is a very long time for an educational project.

The network is credited as being one of the most active and successful projects within the framework of the “Local Agenda 21” in Düsseldorf. It is intensively supported by the city – by the environmental department, the school administrative agency and the Local-agenda-Bureau; but I will arrive upon the point of money later.

Moreover it is a very successful project within the framework of the model programme of the education for the development of sustainability on the levels of the Bundesland Nord Rhein Westfalia, plus the republic of Germany. These bondings contribute not only to the financing of the network’s work, but they also provide the teachers involved with support in their schools, especially from the school leadership.

## **Communication, public response**

### **Why?**

Success is a social construct; it only exists when it is communicated.

### **How?**

The schools in the network have developed a multitude of strategies with which they communicate their work and consequently contribute to the success.

We begin with the pupils: they receive the opportunity to present their results, in reports to the class or in front of the school community, for example.

The schools also publish their results externally, for this they confidently use the mass media.

They publish environmental or sustainability reports as their own publications.

The main presentation medium for the whole network is the use of common sites on the internet. In 2001 I convinced the network to integrate the presentation on to the online information service [umweltschulen.de](http://umweltschulen.de) (sustainableschools.net) for which I am an administrator. There I offer various information on environmental protection and sustainability in schools, it is therefore a very good site for the network to use. In addition, revisions and enhancements can be unbureaucratically carried out here.

### **With which results?**

We all know that presenting is an ideal way to learn. In order for a presentation to be successful the presenter must clearly know the contents themselves. This doesn't only apply to the pupils who prepare a presentation, but also to the teachers, when for example they compile a sustainability report. I have advised many schools on the compilation of their reports and in the process I have experienced how fruitful the discussions about the materials and the manuscripts are for the participants themselves.

Furthermore these presentations almost always lead to a certification and with it to success for those involved. This motivates and gives strength to further work.

By now the all of the newspaper reports about the network and its schools, fill up a whole folder.

As with much in the network, the internet presentations are also a win-win situation. For the participants in the working group it is also a good form of advertisement, which receives between 1,000 and 2,000 visitors a month. It has accrued phenomenally interesting contacts – colleagues from Finland, Poland, Japan, China, India and Korea have visited schools in Düsseldorf. Also contact with Risto Tenhunen arose in this manner. The press and radio have also become particularly attentive to the use of the network's internet site and have then reported about what is on it. And I as the operator of the online information service, [umweltschulen.de](http://umweltschulen.de) have consequently received attractive coverage.

All those who support the work of the schools, receive the certainty, that their encouragement is worthwhile. This is an important basis on which the support is sustained.



## **Money**

### **Why?**

The implementation of sustainability needs financial means, which are not available within normal school finances. The normal financing of schools in Germany functions as follows: that the teachers are paid by the Bundesland and the local authority ("school sponsor") pays the building and service costs (e.g. energy, water and rubbish). Only a small part of the costs are self administered by the schools, that is for example for schools which contain only four year groups, 12,000 Euros a year for teaching and learning aids, photocopying costs and similar.

Individual schools need, for example, material expenses (from measuring apparatus to the costs of manufacturing a sustainability report up, to the largest investments as for example the installation of solar panels) or also costs for consultations. The costs for coordination, representation and also further training are met by the network.

### **How?**

The schools are directly supported by the city of Düsseldorf. Their people of contact are the school administration department and the environmental department/ the Local Agenda 21.

- The school administration department offers the schools money through the "Fifty/fifty" project. In which the school receives 50 cents for every Euro, which they save on energy and water. The other 50 cents remain in the city's budget. As a result of a suggestion made by the network, the city of Düsseldorf has also expanded Fifty/fifty to the domain of refuse.
- Additionally the environmental department/ the Local Agenda 21 has especially financially supported the creation of environmental and sustainability reports. Moreover schools are able to then enter the network and with the start of the implementation of sustainability, they receive a grant of 500 Euros.

On the local level the sponsorship from firms is also to be mentioned. Mannesmann, Henkel and Vodafone have placed free of charge personal advice at the schools' disposal and in part have also donated money.

The costs for the coordination of the network are borne by the Federal Government and the Bundesland North Rhine Westfalia – who finance half the costs of having the project coordinators; the city of Düsseldorf is also involved here, as it places the work space required within the environmental department at the network's disposal.

### **With which results?**

Up to now every school could prepare their environmental and sustainability reports in an appropriate form.

Klaus Kurtz has already introduced how much money the schools have produced within the frame of Fifty/fifty.

I would like to quote to you today a single negative example: the Max-Weber and the Walter-Eucken-Berufskolleg wanted to install solar panels on their shared school building and the Fifty/fifty programme invested money into this project. This plan has

yet to be carried out though, but not because of money, but because the planning permission has still not been granted.

### **Conclusion and results**

The Düsseldorf network has constructed a very efficient support and advice structure for its schools. I also advise other schools in other German cities, and because of this I now know, as a result of seeing how such support in other places is missing, just how exemplary nation wide Düsseldorf is.

My experiences as an advisor enable me to predict in a realistic way the importance of support and of giving advice. We can encourage participants, we can act as a catalyst and accelerate developments. But to change the will, the power of this, the daily work, the perseverance, the many constructive and innovative ideas for improvements – all this, the schools must and can achieve themselves.

I would thus like to end my presentation by expressing my respect for the schools: they do outstanding work, and I am proud and fortunate, that through my work in the Düsseldorf network, I have played a part in their development and with them and from them, have been able to learn.

I thank you for your attention.

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This is the paper-version of a lecture at the Finnish-German Cooperation Seminar “Sustainability in Schools” in Helsinki, 2007-04-03, for more details see [www.umweltschulen.de/audit/duesseldorf/finnland.html](http://www.umweltschulen.de/audit/duesseldorf/finnland.html)

Laura Palmer has translated my German paper version into English.  
Thank you very much!