

# **Education for Sustainability**

Developing a sustainable strategy for Zákolany School

It takes a village to raise a child....  
...and a child to raise a village

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Wiesbaden, 17 September 2003

Anna Jürgensen



## Preface

*It takes a village to raise a child*, as quoted on the front cover of this thesis, is an ancient African proverb. It basically talks about the potential in not only parents and teachers, but also the wider community as a whole in educating the children.

While sitting discussing my work with friends and enjoying some sunshine in the park by Žižkov in Prague, it suddenly hit me that the essence of my thesis is also the opposite. "*It takes a child to raise a village*". Later I found that this same idea is often used in relation to educational movements found all over the world.

So the essence of this thesis is to understand the importance of also letting the children be a part of the community, and the potential in such co-operation. Through the help of children it is believed that the awareness of society in general can be increased.

The unsustainable practices of our society, is a well-known and indisputable fact. But the process of reflecting over our behaviour, understanding its effects on the wider community, and starting to change our practices is remarkably slow.

In the developed world the vast majority of citizens spend a considerable time of their lives in the formal educational system. In the developing world, education for all is a stated goal. The potential of such a system as an agent in the necessary paradigm shift of our society is clear. Education for Sustainability is a concept that has been acknowledged by the international community as playing an important role in that shift.



## **Abstract**

The importance of formal education systems in relation to environmental and social problems has been increasingly emphasised in international agreements and conferences. Despite this fact, the process of implementation in schools is slow.

One important aspect of Education for Sustainability (EFS) is the connection between schools and their local environment. This implies that the schools can expect to take on a somewhat different role than previously. This research project focuses on that connection.

This thesis is an action research project, with the purpose of exploring the potential in involving external actors in the local educational system, in the primary school of Zákolany, a village in the Czech Republic. A framework for the categorisation of these potential external actors was developed.

The main findings of the study show that there are possibilities for village schools to find synergy between their quest for survival and the implementation of EFS.





# Executive Summary

## Introduction

On the international arena education is not only seen as a fundamental human right, but also as a potential promoter of values and attitudes that can stop further unsustainable practices of mankind. The background to this project is the view that educational systems, both formal and non-formal, can be considered as having a potential role in raising public awareness and facilitate for the public to make informed decisions. The specific potential of a school is that all children pass through it, and also its possibility to help address sustainability from a local perspective, with understanding, and possible involvement, of the local community.

This research was a project with Zákolany School. Zákolany School, dating back to the late 19<sup>th</sup> century, is located in the vicinity of Prague in the Czech Republic. The school is a small village school, housing 8 staff and 25 pupils. The vision of the school is to integrate the concept of Education for Sustainability (EFS) in their education and to find ways to ensure their future survival as a school. The project is to serve as a pilot project for the region, but also to provide general research value.

Education for Sustainability is, as the concept of sustainability, widely discussed. The ideas differ in relation to what it should and should not consist of. This research starts from the idea that the social, environmental and economic aspects of our lives are inevitably interwoven, but not yet addressed in such a way. What is in focus is not the label as such, but the role of schools and actors in their external environment in tackling the unsustainable practices of today's society.

## The purpose of the study

The purpose of this Masters thesis is to explore how the redirection of the school, from a traditional school to a school applying the principles of Education for Sustainability, can be of benefit to the school in terms of increased stability and also contribute to the wider community.

As the interaction with the local community is believed to be a key issue in EFS, the purpose is to focus the study on the potential for the school to identify suitable partners, and develop a framework for the categorisation of such partners. The aim is to test the framework's application on the specific case of Zákolany School.

## The research questions

The following research questions lay the foundation of the study:

- *Can any connections and synergy between the school's vision and stakeholder expectations be found, which can be of help in the implementation of Education for Sustainability?*
- *How can Education for Sustainability help the school in ensuring their future survival?*
- *What are the external actors and alliances that could be of benefit for the school?*
- *How could the external actors themselves benefit from the schools redirection?*

## The main findings

There were little, but increasing, stakeholder expectations. From the parents perspective the qualitative aspects were becoming more important. As the parents are free to choose schools for their children, such changes in expectations are important to acknowledge. The support by public authorities for implementing Education for Sustainability was found to be quite low.

In a longer perspective synergy between Education for Sustainability and the general stability of the school are believed to exist. Such synergies could be reinforced by the schools interaction with external actors.

Working more closely with authorities and parents is believed to be of importance, firstly to ensure further financial support and support in terms of incoming pupils. Secondly increased dialogue and involvement of those actors can enable the school to communicate their vision and the value of EFS, so that they enforce the support for such efforts.

In terms of increasing their independence from the local authority as financial supporter, and as sources of support and potential of savings, the network of village schools is identified as a beneficial partnership.

The idea of involving also representatives from parents and local authorities in the network could be a way to combine the interests of schools and stakeholders.

### **Outcome of core project**

The core project, consisting of the development of a new curriculum framework and a strategy for the redirection of the school is still to continue. This research project lead to one important decision at the end. In the last meeting held the four village schools present at the meeting took a decision to formalise their network. The schools also decided to discuss further the possibilities of a common curriculum framework, focusing on EFS and community interaction. What was previously seen as barriers, the schools have now decided to work jointly to overcome.

### **How the study was conducted**

This research was an action research project, where the researcher was actively involved in a change process, but in parallel to the process also observing it. Based on in depth interviews with different actors in the schools environment, a deeper understanding of the opportunities and barriers in their external environment was developed.

### **Theory**

The new role of the school as more independent, and the identified need to develop a better understanding of the external environment, leads to a theoretical focus on drivers of environmental change and stakeholder theory.

Furthermore the idea of the school's identity and image to evolving in the interaction with external actors is the discussed.

### **Final recommendations**

A general recommendation is given to schools to continue their learning process as an organisation, as the potential role of schools is not fully defined and neither is the concept of EFS.

More specifically the Zákolany School is, amongst others, recommended to work more actively with the local authority, the parents and the village school network.

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# 1. Introduction to the Research

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*The first part of this chapter will clarify the concept of Education for Sustainability in the context of this study. It includes an introduction to the concept including some basic literature review. Finally it clarifies the specific problem to be addressed, and in detail the focus of the research project.*

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## 1.1 Once upon a time....

In 1884 to be exact, a school was opened in the village of Zákolany in Central Bohemia, in the Czech Republic. The founder of the school was a man called K.G. Amerling. The school was attracting all the pupils of the neighbouring villages, and in 1911 it had 118 pupils. Amerling was a well-known researcher on teaching methods in the Czech Republic, and applied, what was in his time considered experimental teaching methods. Traditionally the teacher was, together with the priest and mayor, considered a very important person in the village.

In 2003, the situation is totally different. The number pupils are down to 25, and the school building is in bad condition, awaiting its 120 years celebration the coming year. As a result the teachers of the school have decided to take action. The school is intending to open up to the community and further develop its teaching methods. They aim to take on a new integrated role in the society. They want not only to survive. They want to **educate for sustainability**. As there is no clear answer on how this can or should be done, there are many issues and possible strategies for the school to explore. Firstly it is necessary to explore the concept of sustainability in relation to education. This will give a better understanding of the phenomena to be introduced in the school's work, and which will be the focus of this research project.

## 1.2 Exploring the concepts

### 1.2.1 The role of education in relation to development issues

In the Universal Declaration of Human rights formed in 1948 the right to education was given the status of a fundamental human right. In poverty alleviation projects in developing countries much efforts are put in providing the local people with basic education. High levels of illiteracy is considered a main barrier for further development, especially in the case of women who still have relatively less formal education than men. Experience and research shows that education is a central issue in relation to many development issues, such as equity, health, economic and political development and environmental protection (Swedish International Development Cooperation Agency, 2002). UNESCO, also emphasises that education is a "key ingredient" in economic and social development. In 1990, in the Education for All conference in Jomtien, Thailand and in the following 2000 Dakar World Education Forum goals and strategies were formed, to enable further provision of basic education in the world. The main goal is to provide primary education for all by year 2015 (UNESCO 2002).

The educational systems, both formal and non-formal, can be considered as having a potential role in raising public awareness and facilitate for the public to make informed decisions. To be able to make informed decision is fundamental in democratic societies. With

the Aarhus Convention, which entered into force in 2001, the public was given the right to access to information, participation in decision-making and access to justice (UN Economic Commission for Europe, 1998). But in order for the public to request information, they must have awareness of what there is to request, i.e. what information they are in need of to enable an informed decision on their part. The adoption of the Aarhus convention therefore also indirectly requires some efforts for ensuring a certain level of public awareness. It is clearly stated in the convention that “(...) each party shall promote environmental education and environmental awareness among the public” (Article 3:3).

When it comes environmental issues, the problems are themselves believed to be clearly connected to the level of awareness, or to use educational terms the eco literacy levels of the citizens. The educational systems therefore hold a key to achieving change in behavioural patterns.

### 1.2.2 Education for Sustainability

The decade from 2004 – 2015 has by UNICEF been declared the Decade of Education for Sustainability. The need for more people to think about not only the economic, but also environmental and social impacts of their actions, in order to facilitate more sustainable development, has thereby been recognised (The World Conservation Union, 2003).

The importance of education in the confrontation with the unsustainable practices of today’s world has also previously been emphasised on the international arena. Table 1 briefly sums up some important steps in that process.

Table 1 The development of the concept of EFS

Year	Event	Outcome
1972	The Stockholm Conference	Recommendation 96 states that the aim of the environmental education should be to develop involvement in, and awareness of, environmental issues. It states that it should have an” interdisciplinary approach, in school and out of school, encompassing all levels of education and directed towards the general public” and that people should be aware of the effects of their individual behaviour has on the natural environment (UNEP, 1972)
1977	Tblisi Conference on Environmental Education	Environmental education as a life long process, and should therefore be present in all forms of education and be of cross disciplinary character. Furthermore the environment was defined as the “natural and built, technological and social” environment. (UNESCO 1977, In: Wickenberg 1999; In: Palmer 1998)

1990	The World Conference on Education For All, Jomtien Thailand	Stated as one of its main six target dimensions is the need for “increased acquisition by individuals and families of the knowledge, skills and values required for better living and sound and sustainable development, made available through all education channels” (United Nations, 2001).
1992	United Nations Conference on Environment and Development, Rio de Janeiro  Agenda 21	Reorientation of education towards sustainable development identified as a programme area. Article 36 <sup>1</sup> states “Both formal education and non-formal education are indispensable to changing people’s attitudes so that they have the capacity to assess and address their sustainable development concerns.” (UNCED, 1992).
1997	Conference, Thessaloniki Environment and Society: Education and Public Awareness for Sustainability	Acknowledges the concept of Education for environment and sustainability. “All subject areas (...) need to address issues related to environment and sustainable development” (UNESCO, 1997)
2001	6 <sup>th</sup> European Union Environment Action Programme	“Education remains the responsibility of Member States, which are encouraged to ensure environmental issues are included in school curricula”. The focus of the plan is to promote the Member States to, through public authorities and NGO’s, help “people make environmentally friendly choices”, and “protect their local neighbourhoods, countryside and wildlife” (European Commission, 2001 p 10).
2002	The World Summit on Sustainable Development, Johannesburg	In Johannesburg, the importance of Education for Sustainability was brought up as a key issue. A key outcome was the recommendation “to the UN General Assembly that it consider adopting a decade for sustainable development, starting 2005” (UN/DESA, 2002).

Wickenberg (1999, p 107) sums up the UN and UNESCO definitions into two parts: (i) the empowerment of citizens to enable informed decisions; and (ii) the change of behaviour towards more environmentally friendly (sustainable) practices. This is a key point in the concept of EFS, which it is not along the traditional lines of education. The essence of EFS is believed to be the acknowledgment that environmental, social and economic issues are inevitably interwoven, and thereby need to be addressed in a more holistic manner. Education for Sustainability is often considered a development of other concepts like Environmental Education. The purpose of naming it Education **for** Sustainability is to

<sup>1</sup> Article 36 of Agenda 21, is the main chapter related to education. As the title “Promoting education, public awareness and training” indicates, it focuses on education in relation to all aspects of life including the workplace, schools and society in general.

emphasise the involvement of pupils/students/people in hands-on activities and in the development of the knowledge, skills and attitudes necessary to change unsustainable practices (Palmer, 1998).

A brief further discussion of what EFS consists of is provided in Appendix 1. The review of research concerning EFS is held brief. This as much of the discussion is related to teaching issues, and because the main idea of this research is that there is a necessity of action in which the content of EFS is defined and developed.

Also it is believed that what EFS will actually contain is very much depending on the local context. It should preferably, as has been stated by McKeown (2002), be given a name and a meaning suitable for the context, such as in lines with the language and culture where it is used. From now on it will be labelled Education for Sustainability (EFS) in this report, but this does thus not imply that the findings and discussions in this research are limited to this particular concept label.

### **1.2.3 The local context in relation to sustainability**

In relation to sustainable development the power of the local communities are often emphasised. Agenda 21, with its goal to be implemented through the launch of Local Agenda 21 programs, is a prime example. In article 36, it is stated “(...) in particular the analysis of the causes of major environment and development issues [should be performed] in a local context, (...)”. The emphasis is throughout the document put on the potential and importance of local settings (UNCED, 1992).

There is an array of local community initiatives world-wide, both according to the Local Agenda 21 framework and other methodologies and programs. The support of such efforts can be found in national policies, through the work of NGO's and other types of non-profit organisations, depending on country.

So why then are the problems being addressed on a local level? Well, the power of the local context lies to a great deal in the possibility to connect people's awareness to efforts, which can show results in their local area. The International Council on Local Environmental Initiatives (ICLEI) is an example of an organisation promoting such work in relation to sustainability, specifically the implementation of Local Agenda 21. With the slogan “Local Action Moves the World – Join the Movement”, ICLEI continuously act as a support for more than 400 local governments, at the city and provincial level, and hundreds more in specific projects and programs (ICLEI, 2003).

The idea of Education for Sustainability has tended to go hand in hand with the concept of local community development. The educational systems are seen as potential agents of societal change. McKeown (2001) who has developed an EFS Toolkit and articles related to EFS clearly emphasises the role of the local educational systems in relation to their local community. In the toolkit, it is stated that the curriculum and work of a school can be developed in such a way that it reinforces the sustainability goals of the local community.

Others, like Hines (2000), take it even a step further, and promotes a total turn from globalisation to localisation. He emphasises the need to aid and increase the democratic power and involvement of citizens in relation to their local communities, in order to rebuild them to become sustainable.

### **1.2.4 The potential of the formal school system**

“Education, including formal education (...), should be recognised as a process by which human beings and societies can reach their fullest potential” (Agenda 21, article 36.3). The international community, as has been discussed above, has in the last few decades increasingly emphasised the role of educational systems when it comes to preventing further unsustainable practices, with the formal education systems as a natural starting point (UNCED, 1992). Knowledge is not believed to be the sole driver of pro environmental behaviour, but certainly must be acknowledged as an important precondition for developing the skills to act and reflect on behaviour (Jensen, 2002).

The advantage of the formal school system is that the schools are in general the one societal institution through which all citizens pass, or at least should pass, during a considerable period of their lives. In Europe the average compulsory schooling is some 7000 hours per pupil<sup>2</sup> (Eurydice, 2002), and in the EU an average of 23% of people aged 18-24 take the opportunity to enrol in higher education (Eurostat, 2000)<sup>3</sup>. The opportunity to use the schools socialisation function for promoting the ideas of sustainability is evident. To put it simply, the school is where the future producers and, existing and future, consumers can be found.

With the concept of EFS comes also the opportunity and responsibility for the schools to take on a less traditional role. The schools are meant to become part of a larger movement, an awareness raising process. Their formal role can therefore be combined with a role as non-formal educators in the community, for example by enacting as a learning centre also for adults. The schools have traditionally had an important role in society, and are well known to the people in their local community. This role could become even further integrated.

## **1.3 Current situation of EFS**

The opportunities associated with schools in raising the awareness of children, and other members of society, seems evident. Despite this, relatively little has been done. The process has started, but is proceeding at a disappointingly low pace (United Nations, 2001).

There are apparently some barriers in the system. From the perspective of the schools, the time constraints, the financial limitations and the relatively low wages and often decreasing societal status of the teacher profession, can be seen as contributing factors. This was shown in the pre study for this research (for further explanation, see section 1.4) and in recent statistics (Eurydice, 2002). United Nations Commission on Sustainable Development (UN, 2001) sees the schools in general as “chronically under-financed” (p. 7). Research (Wickenberg 1999, Axelsson 1995) also shows the impact of norms. The schools are social institutions, not only steered by both regulation and policies, but also by normative structures (Wickenberg, 1999). And it is clear that the process of changing these conditions is a slow one.

However, there certainly are positive achievements to be found. But as the pre study for this research showed, these good efforts often are depending on a few dedicated people. Also more profound research shows that there is a clear connection between the motivation of

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<sup>2</sup> There are large differences between countries, with up to twice as many hours in certain countries (Eurydice, 2002).

<sup>3</sup> Figures from school year 1997/1998.

dedicated individuals and the success of implementing environmental issues in schools (Wickenberg 1999). Furthermore there is often a lack of support for these dedicated people from the internal organisation, as well as from other stakeholders. Systems for knowledge sharing between the dedicated people and other organisations seem to increase, thus enabling them to find support elsewhere. The Internet is in this case a valuable source, where everything ranging from specific tools (McKeown, 2001) to supporting organisations (World Wide Foundation for Nature, 2002; UNESCO, 2003) can easily be found. But in a longer perspective a broader acceptance of the importance of EFS is needed for these efforts to survive and become more powerful.

As Sterling (1996) states, the schools are not only a solution; they are also a part of the current problem. There is therefore a need to reflect over what is taught in schools, and how. To a large extent it is somewhat of a paradigm shift of our view on the role of education systems and educators that is necessary for a more successful implementation of EFS.

## **1.4 Background to the research project**

It is now time to return to the school of Zákolany, and explain the background to the project and this thesis research.

In May 2003 I was given the possibility to be a part of a project in the municipality of Kladno in the Czech Republic. In the municipality a project of scenario planning for the sustainable development of the local community was initiated in the beginning of the year. Mr Vladimír Dobeš, who also is one of the supervisors for this research, is the manager of the project in Kladno. In the project two groups work in parallel with developing the scenarios. The first group, the so-called core group, consists of local community members of different professions and age groups. The second group, the so-called student group, consists of students from the secondary schools in the region. One part of the scenario-planning project was for the two groups to identify key driving forces in relation to the future development of the city and its region. In both groups the formal education system was put as one of the highest priorities, alongside other forces such as sources for economic development, community identity and transportation issues.

My task in the project was to look at the level of integration of EFS in some of the schools in Kladno and its bioregion<sup>4</sup>, and how this was supported on a local level. In this research project, that study is referred to as the pre study, and a summary of the report and its main findings can be found in Appendix 2. Zákolany School was representing the bioregion in the pre study, and was found to be interested in assessing the possibilities of integrating sustainability in their practices and education. The school has recognised the social, environmental and economic problems facing the community, and consequently also affecting themselves. Most importantly a widespread commitment in the organisation was identified. Thus as Zákolany was identified as having come relatively far in the process of integrating sustainability issues in their work, they were considered a suitable case for an in depth study, and thereby as a pilot case for the region.

As shown in Figure 1, the findings from the pre study feed into this study. Most importantly the findings of this study and the project itself will provide useful information to the region and also be of a more general value to schools in other regions and countries.

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<sup>4</sup> The bioregion included the area surrounding the city of Kladno up to a distance of 20-30 km.

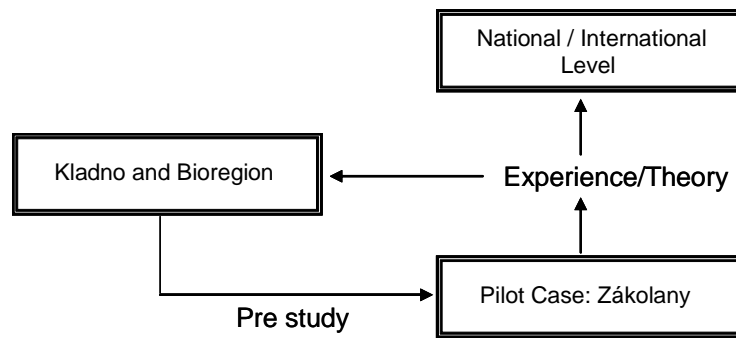


Figure 1 Knowledge connections

I personally share the belief in the potential of schools in helping address the unsustainable practices of today's society. The problem is, as has been mentioned in the introducing discussion, that this development is slow, and does not yet reflect the increasing awareness of society. The beneficiaries of this project, such as the school of Zákolany and the scenario planning project's stakeholders, are interested in exploring the potential in such change.

In order to be implemented the concept of Education for Sustainability in its approach to education and overall community awareness, it will be required of the school to take on a somewhat different role. The purpose is to explore this role, and what forms it could take in this particular case. Focus in the previous research has mainly been on the integration of sustainability in the curriculum and what it should consist of (Stables and Scott, 2002; Jickling and Spork, 1998; Tilbury 1999), whereas the purpose of this study is to focus more on the potential in working with other actors and alliances in this process. As this research project falls under the label of Action Research, which is to be explained further (see 2.2.1), the aim is also add to the research on the applicability of action research in this type of work.

## 1.5 Vision

Before defining further the problem under study, it is of interest to clarify the vision of the school, as this works as a foundation for the core project, and also the direction of the research.

The concept of a vision can be interpreted in many different ways. According to a typical dictionary definition a vision is defined as "an idea of mental image of something" and "the ability to imagine how a country, society, industry, etc. could develop in the future and to plan it in a suitable way" (Cambridge Advanced Learner's Dictionary, 2003). In terms of management it is often seen as the manager's view of the preferable direction of the organisation, requiring a culture that supports it (Kakabadse, 2001). According to Collins & Porras (1998), the vision consists of two parts, the core ideology and the envisioned future. Further the motivational aspects of the identity and vision are emphasised. The need for a common vision can be considered important for the further work of the organisation. As has been stated by Senge (2000, p 21) "[A shared vision] can provide the power for people to learn and grow even when their situations and environments are disempowering". Effective visioning requires of the organisational members to embrace values such as trust and creativity, as well as being willing to consider options and share information (Kakabadse, 2001).

In the first interview with the headmistress, when the clarifications for the further proceedings of the project were made, she said that the school was known for its family like atmosphere, and that this is something that should always be their main vision. In the discussions at the workshop with the teachers (27 June 2003), this was widely supported. In a workshop (27 June 2003) with the teachers and the headmistress, a list of different aspects of their vision (see Appendix 3 for more details) was created. The school strives to be a school with:

- More interdisciplinary and alternative approaches (such as outdoor teaching);
- Focus on individual pupils;
- Openness towards community and stakeholders

## **1.6 The problem**

The school wants to implement Education for Sustainability in their teaching. As there are guidelines, but no set rules to how this can be achieved, the schools have the opportunity to explore the possible strategies they can apply for a successful implementation.

At the same time, the practitioners of the school, experience a constant level of worry, in relation to the fact of decreasing number of pupils. A low number of pupils consequently leads to a high cost per pupil, and the school feels that there is a risk that the external financial support may be decreasing in a longer perspective. They are therefore, looking for a solution to this problem. The continuing survival of the school is obviously necessary for them to take on an active role in the local community, in accordance with EFS.

Furthermore, the school is becoming more independent, which provides more flexibility, but also increases their responsibility and workload. In the pre study it was found that most of this change was seen as a barrier, especially due to limited resources and knowledge in relation to the management of such change. Starting from January 2004 there is also the possibility for the school to develop its own curriculum, which is again seen as increasing the workload. In relation to their wish to integrate Education for Sustainability though, it is perceived as an opportunity.

As has been discussed in the introduction, a criterion for sustainability in educational systems is the application of a wider scope and most importantly openness in relation to the surrounding environment, and its actors. In the case of Zákolany School, the practitioners of the school themselves identified the lack of openness as a negative aspect of their current practices.



## **1.7 Research focus**

### **1.7.1 Purpose**

The purpose of this Masters thesis is to explore how the redirection of the school, from a traditional school to a school applying the principles of Education for Sustainability, can be of benefit to the school in terms of increased stability<sup>5</sup> and also contribute to the wider community.

As the interaction with the local community is believed to be a key issue in EFS, the purpose is to focus the study on the potential for the school to identify suitable partners, and to develop a framework for the categorisation of such partners. The aim is to test the framework's application on the specific case of Zákolany School.

### **1.7.2 Research questions**

In order for the purpose of the thesis to be fulfilled, the following research questions were answered:

- Can any connections and synergy between the school's vision and stakeholder expectations be found, which can be of help in the implementation of Education for Sustainability?
- How can Education for Sustainability help the school in ensuring their future survival?
- What are the external actors and alliances that could be of benefit for the school?
- How could the external actors themselves benefit from the schools redirection?

## **1.8 Scope**

The main aspects of the scope of this research are listed briefly below. As this is an action research project, the scope also has had a tendency to change, and to be reshaped, in relation to the development of the core project. Therefore, a deeper understanding of the scope of this research can be found in the methodology discussion (see chapter 2)

- The research focuses on the school of Zákolany.
- The focus on stakeholders is mainly from the specific local context.
- The main focus is on the opportunities in the external environment of the school, after having obtained an understanding of the internal factors.
- The limited time frame of the study contributed to the scope, especially in the case of the interview studies, which preferably could have included more schools, and schools from more countries.
- This research avoids, as far as possible to discuss actual teaching methods, and instead focuses upon strategic levels, and identifies from a more management like perspective, the opportunities in the system.

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<sup>5</sup> The term stability here stands for financial stability, as well as stability in terms of stable support from the community in their general position as the village school and their work with EFS.

## **1.9 Guide to the study**

To facilitate reading this thesis, a brief overview of the coming chapters is presented.

- Chapter 2 This chapter outlines the methodology used for the research, and specifies the focus and content of the thesis.
- Chapter 3 The findings from the review of the situation of Zákolany School are provided here. Based on those findings, a sum up in the form of an evaluation of those conditions, is provided.
- Chapter 4 Here the result of the interview studies in other countries are presented. Together with the conditions of Zákolany they are fed into the further analysis. The theoretical starting point, used in the analysis, is therefore also presented here.
- Chapter 5 This is the section where the situation of Zákolany is connected to relevant theory. The discussions relate to the theoretical framework as well as to the lessons learned from the interview studies of chapter 4.
- Chapter 6 In this chapter, the framework for categorisation of external actors is explained and thereafter is tested on the case of Zákolany as a part of the core project, but also serves as a general example.
- Chapter 7 In the conclusion, the research questions are revisited and answered.
- Chapter 8 This chapter provides general reflections on action research in schools and the opportunities for schools to continue their learning as organisations. Finally, it gives more specific recommendations to Zákolany School.
- Chapter 9 Suggestions for further research.

## 2. Methodology discussion

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*In order to ensure the validity of the research, and to provide the reader with an understanding of the logic behind the conduct of it, this chapter explains the methodological background and accordingly the chosen methods.*

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### 2.1 Viewpoint of the researcher

My view on knowledge is that it is closely connected to the understanding of the world, and therefore, part of a social context. Consequently, a phenomenon under investigation, or subject to one's research, must be understood in its social context. This view on knowledge and research admits the unavoidable subjectivity also of the researcher herself/himself.

One main personal starting point, which is of importance to clarify, is that in my view it is important to incorporate the issue of sustainability in the educational systems. It has been criticised as being value laden (Jickling and Spork, 1998) and along the traditional lines of teaching, steering the way pupils are to think. I have two main standpoints in relation to this. Firstly, I believe, that there is no such thing as value free education, and I don't believe it should be. Just as I believe society of today is in need of laws and policies to regulate environmental problems, I believe some direction is needed also in schools. Secondly, my understanding of what Education for Sustainability includes, is in fact the importance to let pupils develop their own critical thinking and reflection of what they are learning. Hopefully this will, in a longer perspective, lead to a better understanding of mankind in relation to the environment, and require less future regulations. Not only are the unsustainable practices of the people today a known fact, but also, in my view, the educational system is not working to target those issues, neither directly through behaviour, nor indirectly through the teaching methods. I believe a paradigm shift of our society is needed, and that it is therefore, of importance to enable the children, as well as the older generations, to develop the skills to face these problems of the present and the future, whatever solutions they may choose.

### 2.2 Research methods

This project is an action research project, which is further explained in section 2.2.1. It involves an initial review to better understand the object under study, in this case Zákolany school, and to find a defined scope for the project. This part of the research is presented mainly in Chapter 3. From Chapter 6 the strategy development is presented. The final discussion and recommendations based on the study, analysed on the basis of additional studies on good practices and theoretical findings, are presented in Chapter 8.

The overall logic of the research methodology is shown in Figure 2.

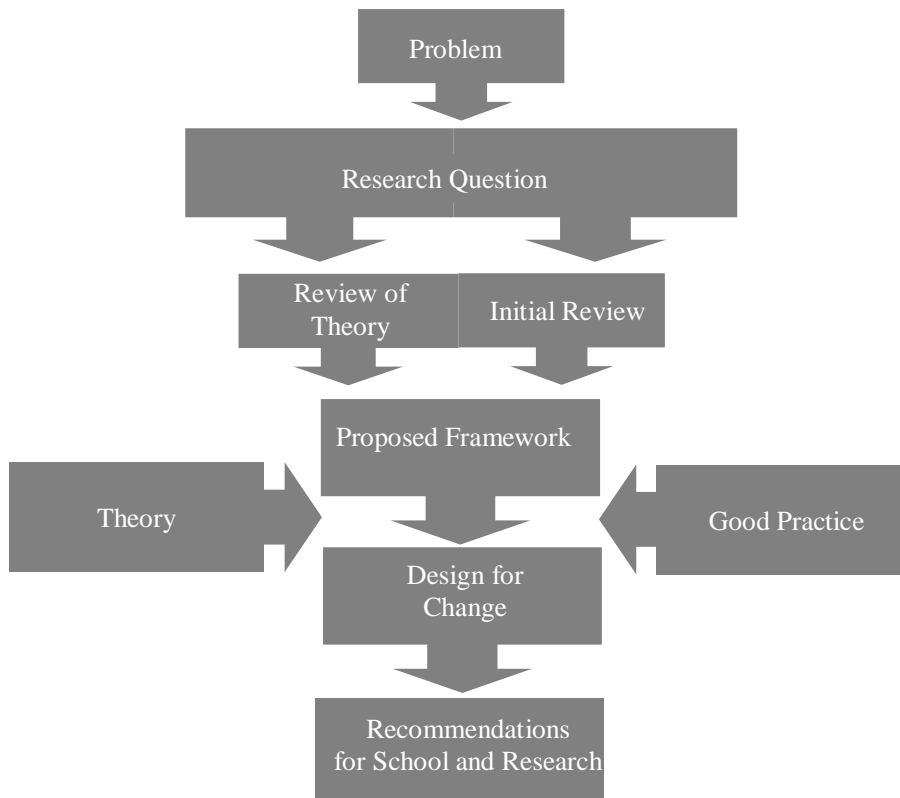


Figure 2 The steps covered in the research process of this thesis

The research problem provides the focus of the whole study. An initial review on the internal and external factors affecting the school is conducted to create an understanding of the context of the study. Also it requires a certain level of theoretical knowledge of the concepts under study. In addition to this, interview studies, from which experience and knowledge can possibly, are conducted. Previous research, in addition to the experience from good practices, contributed to forming a possible solution for the identified main problem.

The final implementation of the suggested solution and its evaluation will fall outside the time frame of the project. A brief evaluation of the applicability of the provided research framework and the action research methodology will finalise the thesis.

### 2.2.1 Action research

Action research can be defined in different ways. It is a type of methodology that is considered to have existed for a long time, but only given a label in the last few decades (Axelsson, 1997). Action research has become common in relation to educational change, and also in relation to educational change in relation to environment and sustainability (Elliot 1995, Axelsson 1997, Wickenberg 1999). Common for the different views on action research is the importance of critical reflection and the cyclical learning process. New findings are continuously interpreted based on knowledge from previous cycles, or “loops” within the research process (Dick, 1999).

Action research, in this case, is closely related to the method of participative observation. Action research is sometimes also referred to as participative oriented research (Holmer & Starrin, 1993), and is then referred to as research as a common task with the practitioners. The positive aspects related to this type of study are, according to Wallén (1996), that it gives

access to internal knowledge, such as the understanding of the social interplay and a better understanding of the tacit knowledge such as norms and values. This type of participative observation can be done openly or hidden. In this case the obvious choice is the open observation as the objects of the study are already aware of it, as they are its main clients.

The pre study as well as the current study limits the possibility of the researcher to act as an external observer. The involvement with the school is necessary and is believed to be beneficial. This gives certain implications for the conduct of the study, and in ensuring its validity (see 2.4). The action research method was found suitable as it is considered fruitful for the practitioners, as they become more a part of the process. The methodology of scanning and making use of external actors and factors is hopefully passed on to the practitioners. As the headmistress has wished for better knowledge on how to think in managerial terms about the school and its strategies, it is a useful learning process for her and the other practitioners. This also helps avoid that the knowledge leaves with me as the researcher as my part of the project ends.

Action research is considered useful in relation to Zákolany for a number of additional reasons. Firstly, it is a study of a change process, and most importantly a type of change where there are no right answers. In such a case, academia (i.e. my research) and the organisation can mutually benefit from collaboration (Roth, Sandberg and Svensson, 2002). Secondly, it is a project involving many variables, and applying a spiral process, back and forth between theory and reality, is considered helpful in sorting concepts, and understanding processes.

Action research can be considered a two-fold research method. It consists of a so-called *core project*, which involves all actors including the researcher, and the *research project* conducted by the outside researcher. These two run in parallel, as shown in Figure 3.

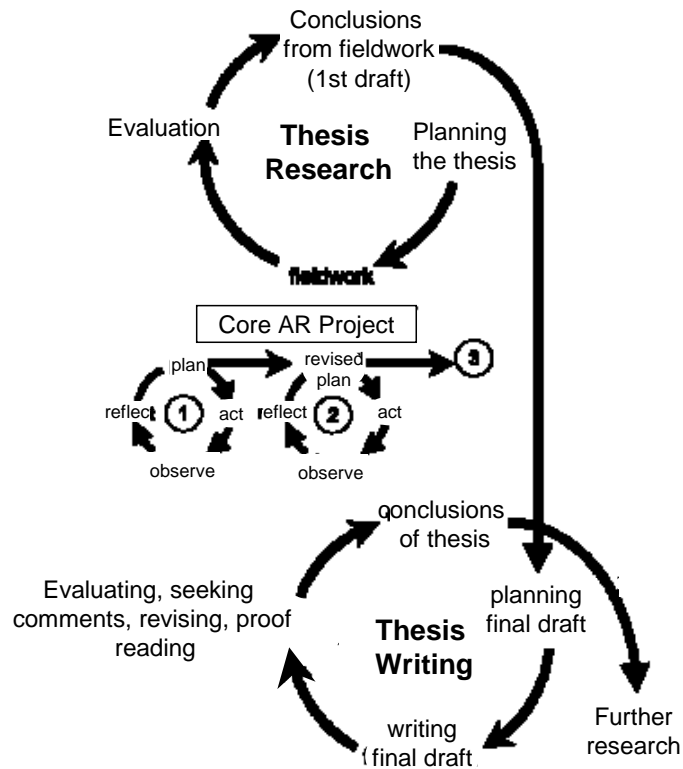


Figure 3 Explanation of the connection between Thesis Research and a Core Action Research Project (Zuber-Skerrit and Perry, 2002).

The core project is explained in the following section. The presentation of the study though is according to the steps in the research project.

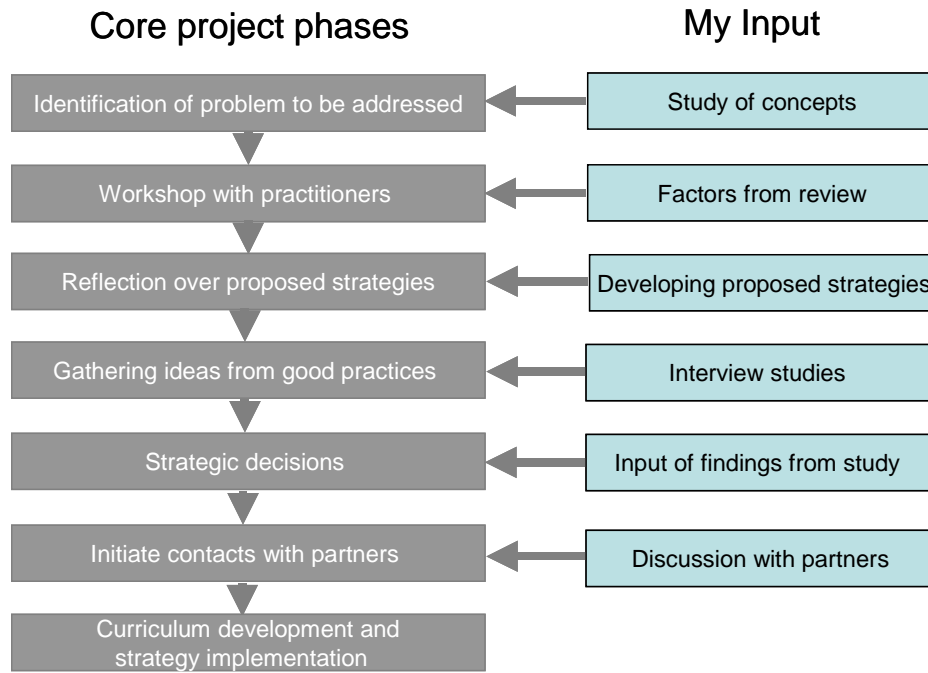
### 2.2.2 Core project and input of researcher

The core project involved all teaching staff of the school, and me as the participant researcher. Mr Vladimír Dobeš moderated meetings with members of the core project. Two of the teachers, as well as Mr Dobeš, are parents of children at the school.

The aim of the core project is to form a common vision and strategy regarding the school. The strategy includes the development of the new curriculum, before January 2004, and the development of the overall management issues of the school.

The research project focused on the external aspects. My contribution to the core project was therefore to help the schools practitioners open up their perspective to include the external actors, and enable further interaction with their stakeholders. My role was both for the core project, and for my research, to create a deeper understanding of the external barriers and opportunities related to their vision and plans for change of the school practices.

The core project phases and my contribution as researcher are shown in Figure 4



*Figure 4 Core Project Phases and Input from Researcher*

The main idea of action research is that it not only gives the researcher better insight into the object of study, but also is to make the practitioners benefit from the researchers involvement. In other words, the researcher should contribute to the project with theoretical knowledge and/or practical experience. In this case the knowledge of me as a researcher is firstly to help fill the capability gap of strategic thinking, and find useful related theories. As I have a degree in organisational theory, and has done previous thesis research on knowledge management in organisations, my input is believed to be of value to the school. In the development of the strategy for the school and my focus on the external actors, it is also simply my availability of time to deal with these issues that is beneficial, as the school staff lack such resources. It is an aim to help them develop a method to enable systematic approach to the business environment, to ensure the continuous work with it after I as a researcher leaves the core project.

### 2.2.3 Initial review

An initial review on the school itself was conducted, in order to understand the context of the continuing study. The review was initiated in a previous research assignment, so the work in this study aimed at giving some more depth to the previous findings. The aim was to enable a better understanding of the school, both in relation to its internal processes and its external environment.

The following sub questions were of guidance for the review:

- What are the system opportunities and barriers to change? (I.e. external limitations)
- What are the system trends, such as planned policies and regulations.
- Where does the perceived threat of closure of the school originate from, and how serious is that threat?

- At what levels can support be found, both financial and other types of support, such as for Education for Sustainability.

## 2.3 Data collection

As the study is of qualitative character, the focus was on in-depth interviews, and on creating an understanding of the case. As the research was coloured by my post positivistic viewpoint, it is was not designed to find any “right” answers, but as a part of a learning process to try to find possible solutions.

The respondents for the study have been chosen in relation to different levels. The levels were chosen on the basis of the findings of the pre study conducted on the educational system of the region, where also the main actors were identified (see Appendix 4). The levels and the respondents are shown in Figure 5.

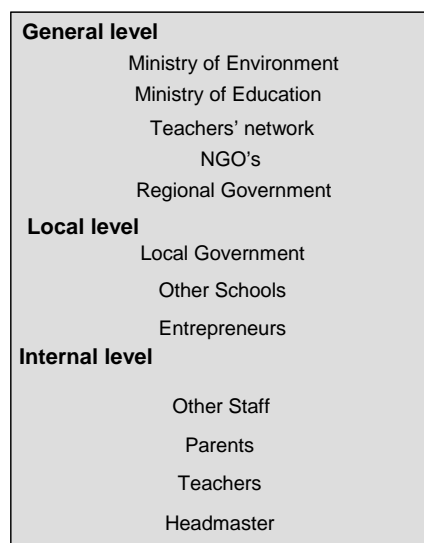


Figure 5 Interview Levels

All respondents of the general level, the local government and the internal level are of importance for the study on the case as such. Furthermore, the local and internal level was in focus for the action research.

The interviews were of formal as well as informal character. Because the action research created a close relationship to the practitioners of the school, as well as to many community members, informal interviews and discussions were enabled.

The interviews with authorities aimed at finding more information on policy trends and on evaluating the seriousness, and more clearly defining, the perceived economic threats. These interviews were also conducted to find to what extent policies and possibly grant programs are formed specifically in relation to EFS.

The intention with the interviews conducted with NGO's was twofold. Firstly the aim was to locate sources for knowledge on EFS, and therefore possible partners. Secondly it was a way to find out more information on other sources of funding and their view on the trends in support from authorities.



The parents were believed to be of great importance, as they are main stakeholders of the organisation, and it is their expectations that should be met, or influenced by the school.

All respondents are presented in Appendix 5, in order to further explain their contribution to the research. All respondents relating to the good practice studies are presented in Appendix 6.

## **2.4 Validity of results and its limitations**

As discussed, action research involves both a core project and a research project. It is of importance for the researcher to be able to distinguish the one from the other, but at the same time let both benefit from each other. This complication can have certain implications for the validity of the results. Also, the methodology, as such, can both lead to unwanted limitations, but on the other hand open up new potential.

### **2.4.1 Internal and external Validity**

In the case of this research project, the internal validity is not believed to be a problem, as the project was conducted in close relation with the practitioners and coincides with their interests. The external validity, i.e. giving the study a general research value is of high importance and needs to be in focus. Even though it is of importance to understand the case, and conduct the action research, in relation to the local context, certain knowledge should be identified which is not completely context specific.

The study should, as was initially described, enable certain knowledge sharing in the region, as well as out to the broader society. The school of Zákolany is only one of many village schools, in Europe and most certainly in other countries, worrying about closure. Also it is an example of a school, not yet exploring their potential role as implementer of sustainability, but with the willingness and potential to do so.

Finally the projects also provide certain conclusions on the usefulness of action research in relation to this type of project and the methodology used in the process.

### **2.4.2 Limitations**

There are certain limitations embedded in Action Research as such, due to the fact of active involvement of the researcher. In this case though, the positive aspects of such research are clearly counterbalancing that limitation. As was discussed in section 2.2.1 the characteristics of this study are in favour of such an approach. The mere fact that EFS itself involves local community interaction, it is believed that my interaction as a researcher is beneficial for the purpose of the research, as a whole.

The main limitations in the process are the language barrier and the timing of the study. The language barrier becomes most evident at times of in-depth discussions, but the problem can be limited through good translation. The limitation of observation could not be surpassed by such measures. On the other hand, certain interviews were actually facilitated by the fact that I was a foreigner, which seemed to increase the level of interest from the respondents.

### 3. The case – Zákolany

This section focuses on the findings of the initial review in the action research process. It is introduced by a brief overview of the framework developed, from the theoretical search in relation to EFS and the case itself.

#### 3.1 Classification of partnerships

As has been identified, the vision of the school is not only to improve its internal qualities, but also to open up the organisation to the surrounding community. In relation to these strategic choices, the evaluation of partner and network possibilities should be done accordingly. In other words, the external actors with whom there are possibilities of collaboration, should be chosen on the basis of their possible contribution to the vision of the school. Therefore, a categorisation scheme has been developed. The following types of partnerships can be identified in relation to the vision of Zákolany School and Education for Sustainability:

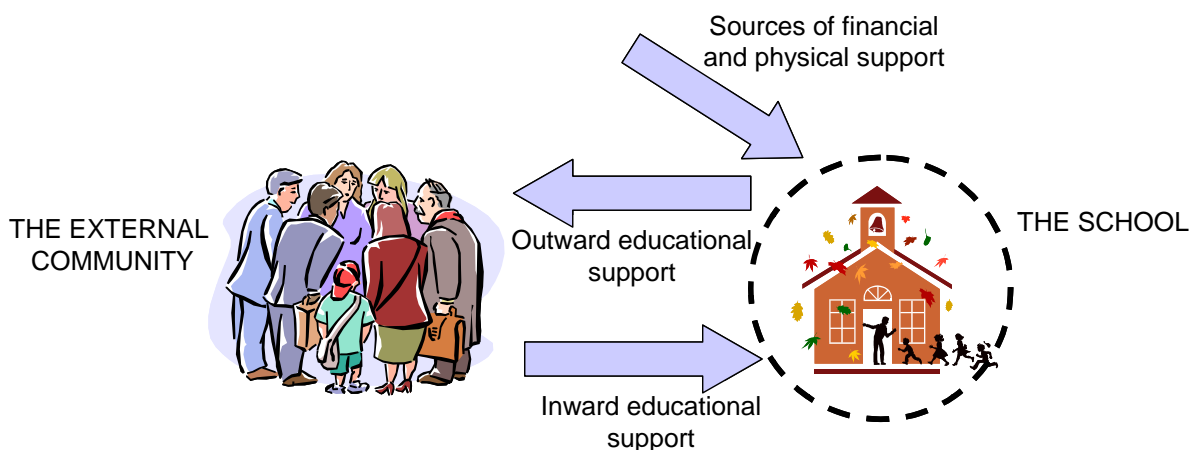


Figure 6 An introduction to the three types of partnership relations

Figure 6 provides a conceptual view of the elements of the integration process of EFS. The proposed framework, consisting of the categorisation of partners, is explained in further detail in Section 6.3. Now the main findings of the study of Zákolany are presented. The findings are of importance to create an understanding of the potential drivers in the internal and specifically in the external environment of the school. These results are thereafter analysed with the developed framework.

#### 3.2 Zákolany – a presentation of the community

Zákolany is a village in the eastern parts of the region of Central Bohemia. Central Bohemia is one of the Czech Republics largest regions, with over one million inhabitants. The city of Prague is located in the centre of the region, but has its separate regional authority. Central Bohemia is a diverse region, with both heavy industrial parts, and other parts mainly depending on agriculture.

Zákolany has a total number of inhabitants of 488 people (2001). Belonging to the municipality are also the two villages Kováry and Trněný Ujezd. In the area three valleys come together under the Budeč hill. Located on the top of the hill is the oldest Czech stone building, the Rotund<sup>6</sup> of St. Peter and Paul (Černý, 22 June 2003).

In this section there is a short description of the village context in terms of economic, social and environmental aspects. The factors are of interest for the development of the school's strategy in terms of sustainable education, especially in terms of connection to the local context.

### 3.2.1 Economy and infrastructure

The numbers of jobs in the village are approximately 50, of which non-inhabitants occupy 25. Over the last decades, the amount of jobs has decreased since several industries have closed down, such as a local piano manufacturer. In total 43% of the inhabitants are economically active, of which 83% work outside the village. According to the mayor the trend is slightly changing towards a net increase in the population, and the goal is to attract more young families to the village (Černý, 22 June 2003).

The location of the village makes Prague, and other towns in the region relatively accessible. A quite large amount of people living in the village is not registered there, which as a result gives less tax income to the municipality. The number is considered to be substantial, with a relatively large loss of municipal tax income as a result. (Černý 22 June 2003).

The infrastructure has undergone some major changes in the last decade. The municipal water supply system was completed in 1999, and now a gas system is being installed. The system is to provide gas to all households and public buildings in the village; and the project is scheduled for completion in 2004.

### 3.2.2 Social and political situation

One acute social issue in the municipality is the problems with integration of inhabitants with different cultural background; the village has a Roma community<sup>7</sup>. This is unfortunately a typical problem in many eastern European countries, and especially the problems with integration of Roma in schools and communities has been highly criticised by the European Union. The children are often, due to language difficulties or purely based on their origin, put into special needs classes rather than being integrated with other children (The Guardian, June 2003).

The direct involvement of the village inhabitants in the decision making process is limited, mainly due to lack of interest. This finding was supported by interviews with board members and other community members. The board meetings are held approximately four times a year, and the attendance is 10-15 people per meeting.

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<sup>6</sup> Round stone building. The rotund on the Budeč hill is a very important Czech historical site. According to some it was here the first Latin School in the Czech lands was founded and where the prince St. Václav was educated.

<sup>7</sup> Roma is the correct name for the people often referred to as Gypsies. The Roma people are of ethnical minority in all countries where they are living, and their situation is problematic in terms of integration. The situation is believed to be worsening since the fall of socialism in Eastern Europe. In total Europe has more than 15 million Roma (Nationalencyklopedin, 1996)

The main public social meeting points in the village are local pubs. Apart from that, the places where people can socialise, except private initiatives, is a fitness hall situated in the school, the shop and the local library in the school building.

### **3.2.3 Environment**

The landscape of the surroundings has an important natural value, and with the hill of Budeč and its famous Rotund, there is also a cultural heritage of importance. This sets certain limits for the physical development of the village, such as expansion for real estate development, as the cultural heritage is to be protected.

There are several negative environmental issues associated with practices of the inhabitants of the village. There is a relatively new central waste management system, but it is not fully functioning yet. Individual households' burning of their garden waste, and most worryingly also household waste such as plastics, is still quite common.

The village has neither a sewage system, nor a wastewater treatment system. Many houses simply have a septic tank, or even a pipe-leading straight into the local stream. There are certain individual initiatives to biologically treat the wastewater, but they are so far very limited in number.

The water quality of the region is very low, with several highly and even very highly polluted water streams. The trend is that the conditions are improving (Charles University Environment Centre, 2000).

In general there is low awareness of environmental issues, which the continuous burning and illegal dumping of waste indicates. But on the other hand things are starting to change. As an example, one of the board members in the local municipality has recently been assigned the responsibility of environmental issues.

## **3.3 Zákolany primary school**

### **3.3.1 System background**

School attendance in the Czech Republic is compulsory from the age of 6 to 15. The primary schools can provide the possibility for the pupils to complete their whole compulsory schooling. At the age of 11-13 the pupils have the choice to leave the primary school for gymnasium, a type of secondary school, after having passed an entrance examination. The secondary school system offers different opportunities. Apart from the gymnasium, there are also technical schools (specialising in a range of subject areas, such as chemistry, business and art) and vocational schools. The latter two options are only available after having finished primary school. Education at state schools is free of charge until the age of 18.

The quality of the education is monitored by an educational inspection, established by the government. The results are reported back to the responsible level of government, and are also made public on the Internet.

### **3.3.2 Organisation**

Zákolany primary school is the only school in the village. It provides education for the first 5 years of the Czech school system. The pupils attend the school from the age of 6. In the school there is in total 25 pupils. The small number of pupils in relation to the number of

levels of schooling has, as a result, that mixed classes are necessary<sup>8</sup>. The composition of the classes differs from year to year, depending on the age distribution of the pupils. It can also vary depending on the subject taught.

The school employs eight people in total. One headmistress, two full-time teachers, two part time teachers, a caretaker and a man responsible for the boiler. Furthermore there is an assistant working at the school with a child with special needs. This assistant is employed by the parents of the child.

### 3.3.3 Curriculum

The current curriculum follows the national standards. The subjects taught in the school are:

▪ English	▪ History
▪ Art	▪ Physical Education
▪ Czech Language	▪ Music
▪ Practical Work	▪ Maths
▪ Geography	▪ Nature Education

The curriculum is one of three programs, of which the school once had the opportunity to choose. There are small differences between the programs. The output, and consequently the criteria used at inspections of the schools are the same (Bulanová, 11 June, 2003; Coufal, 1 July 2003). There are also organised free time activities after school hours. They include music, theatre and sports etc.

### 3.3.4 Financing

There are both public and private schools in the Czech Republic. The private schools are mainly financed by tuition fees, and some of them are also partly financed by local governments. The public schools are financed both from state level and from local level. In the primary schools there is funding from the state based on the number of pupils, which is to be used solely for costs related directly to the education, such as teachers' wages and educational material. Secondly the schools apply for funding from the local government to cover the costs related to the facilities of the school, such as energy, furniture etc.

The Czech administrative system is going through some central changes. In 2001, a nationwide reform closed down the district offices, and 14 new regions were formed. This has had implications also for the school system. The regional government is now the formal authority for secondary schools, and the administrating authority of the state funding for education both in primary and secondary schools (Ministry for Regional Development, 2001; Coufal, 1 July 2003).

The primary schools are established, and under the responsibility of the local government. As in the case of Zákolany, there are not enough pupils to meet the requirements for funding from the regional government. The government has set a minimum number of pupils per teacher. Concerning primary schools there are three main categories:

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<sup>8</sup> A system where the age group of pupils are mixed in the lessons, is in this thesis referred to as *mixed classes/mixed class system*. As an example a school may consist of two classes, one with year 1-3, the other with year 4-6. The division differs from school to school, and is mainly depending on the number of pupils but can also be a matter of teaching preferences.

- |   |                |
|---|----------------|
| 1. Schools with age mixed classes, without complete primary schooling | min: 13 pupils |
| 2. Schools without complete primary schooling                         | min: 15 pupils |
| 3. Complete primary schooling   | min: 17 pupils |

As long as the local municipality covers the additional costs, the regional governments obtain further approval for funding the school, from the Ministry of Education. It is only the local municipality that has the authority to totally cut funding and thereby to close the school (Coufal, 1 July 2003).

The local municipality allocates one fifth of their annual budget for the school. If pupils are transferred to another municipality, e.g. children with special needs or in the case when they are leaving the school to start in year 7, then the municipality will have to transfer money to the municipality receiving the pupils.

An article published on June 26<sup>th</sup> (PRAVÓ, 2003) announced the plans of the Ministry of Education to require from the regional governments to be more stringent in relation to small schools with too many teachers per student. The background to the decision is that there has been a decrease in pupils in the Czech Republic in general, but a relatively constant number of teachers. The aim with the policy is according to the regional government, not to close schools, but through more financial constraints encourage them to merge, or close on the initiative of the local municipalities. Furthermore the regional government states that the main point is to acknowledge the fact that there is a problem, and to encourage change as the economic pressure will possibly increase in the future (Coufal, 1 July 2003).

Another central change in relation to the schools is that they are becoming more independent, and have an increasing responsibility for their economy. Since this year (2003) they are responsible for the administrative and economic work related to the school. This was previously handled by the local authority. The independence opens up the opportunity for the school to use its premises for other purposes than schooling alone, such as renting it out to other organisations and in general use if for other activities than traditional school activities. The trend towards more independent schools also has had as a result that the parents are given the right to chose schools for their children, under the condition that there is a place available.

### **3.4 Education for Sustainability**

#### **3.4.1 Policy levels**

In the Czech Republic there are three main authority levels, through which educational policies are channelled. In the case of primary schools, like Zákolany, it is mainly the local government that can directly require the implementation of policies in the school. So the link from national level down to the local level is interesting to look at further, as well as the possibilities of the support directly from the other higher levels of authority.

##### **3.4.1.1 National level**

**On a national level** policies in relation to education, and environmental and sustainability issues are formed both in relation to the Ministry of Education and the Ministry of Environment. Sterling (1996) stated already in 1996 that “a number of countries have begun

the process of strategy development for environmental education and public participation – a number of countries have taken a lead such as, (...) the Czech Republic (...)”. Also the initial review of the conditions for Zákolany shows, that from a government level there are at least rhetorical, and in documents defined goals, to further incorporate sustainability issues in policies overall. In 2000 the SPEVVO, the State Program for Environmental Education, Training and Public Awareness, was adopted by the Czech government. This plan states that the environmental education should be incorporated in, and understood in relation to, all policy areas. Consequently the Department of Education was also included, and has now accordingly developed a plan for the implementation of these issues in the strategic planning of the department. In relation to SPEVVO there is a commission of specialists, such as members of NGO’s who are involved in developing action plans (Kvasničková, 3 July 2003; Kulich 1 July 2003) In accordance with SPEVVO the Ministry of Environment and the Ministry of Education should both be involved in the development of strategies related to education for sustainability, with the main responsibility in relation to pupils and students relying upon the Ministry of Education (Ministry of the Environment, 2000). The co-ordination between the departments, and also in relation to other relevant departments, is not formally organised (Kulich 1 July 2003; Tomek 16 July 2003). The support given to NGO’s working with environmental education, as well as the major proportion of the funds related to education and environment, comes from the Ministry of Environment (Jech and Boušková, 5 September 2003). A recently published report on the implementation of EFS in the Czech Republic states, that it is the Ministry of Environment that has taken the lead. It also identifies the establishment of more co-ordinated co-operation between departments and authority levels as a key challenge for the Czech Republic when it comes to successful implementation of EFS (Center for a Sustainable Future, 2003).

#### **3.4.1.2 Regional level**

Since the division of the Czech Republic into regions in 2000, a great responsibility for the management and financing of schools has been delegated to the regional governments. Therefore, the implementation of the national policies is partly depending on these new units of governance. The promotion of education for the environment and/or sustainability differs from region to region (Kulich, 1 July 2003; Jech and Boušková, 5 September 2003). In the case of the region of Central Bohemia, to which Zákolany belongs, the focus is mainly on the financial and administrative aspects, rather than qualitative aspects. There is a rather strong belief in the more traditional education system being preferable, at least from the interviewed director of the Department of Education, Youth and Sports. There is no specific funding from this department in relation to EFS initiatives or projects. It is stated that all programs are developed with sustainability as the goal, and are believed to fulfil those goals even if that is not the project’s main purpose. But there is now a systematic approach to monitor if this actually is the case (Coufal, 1 July 2003). The situation in relation to the co-ordination of departments is similar to that on the national level, i.e. not formally organised. Each area has its own grant system, and there are some discussions on the board of the regional department in order to co-ordinate. Mostly though, it is depending on the people if they view their work in a broader perspective or not (Šorm, 17 July 2003).

#### **3.4.1.3 Local level**

On a local level there seems to be relatively little concern in general about the content of the education. There is no specific support for the changes, but on the other hand the mayor is convinced of the quality of the teachers and supports the idea of less conventional teaching methods. As the financing of the municipality mainly concerns the facilities, it is also those issues that are of concern to the local government. There is no Local Agenda 21 in the

municipality. There is, in general, no planned link between the educational system and the community related issues, such as social and environmental issues.

#### **3.4.1.4 EU level**

On June 13-14, 2003, the Czech Republic had a referendum regarding the accession into the European Union, and its citizens voted in favour. As a result the Czech Republic will officially join the EU in May 2004. This may have important implications for coming national policies in relation to the educational system, and also in relation to environmental issues. The pre study showed that certain national policies, such as the regulation of the amount of required hours of school attendance, have been changed to match European standards. Also, in regards to environmental performance, the accession into the European Union has required changes. These changes were done in 4 transition periods, with increasingly stringent requirements on different aspects such as water and air quality, waste management and nature protection (Jech and Boušková, 5 September 2003).

#### **3.4.2 Other initiatives**

There are increasing efforts initiated by individual schools across the Czech Republic. These schools find increasing support from teaching centres and other types of NGO's. The Czech Republic has a relatively small number of NGO's, especially large organisations. The largest organisation has, according to Jiří Kulich, approximately 5000 members. But the trend is that the numbers of NGOs and members are increasing (Kulich, 1 July 2003)<sup>9</sup>. In an interview with the regional government, Mr Zbynek Šorm (17 July 2003) stated that the civic life was clearly interrupted and that community associations ended with the Second World War, which partly explains the small number NGO members.

One NGO, focusing specifically on the integration of environmental education and sustainability in Czech schools, states that the demand of their services is increasing at a faster rate than what they are able to supply. The difficulty for them as an organisation is to attract knowledgeable and dedicated young people as well as further funding (Kvasničková, 3 July 2003).

#### **3.4.3 The school itself**

The school in Zákolany is a good example of a school that has taken the initiative to start the process of EFS by themselves. They are clearly concerned with the problems of the local context, and are already working with social and some basic environmental issues. So far though, the work has mainly been focused on internal activities. In terms of their own physical practices certain achievements, such as source separation of waste, have been achieved. In relation to the actual teaching aspects, they are working on both environmental and social issues. As there are relatively many children with special needs, and of different cultural backgrounds, the social issues have become a natural part of their work and focus of their efforts. As a concrete example of an internal effort, the pupils themselves have, together developed and agreed on the rules of the school, including social rules in relation to their classmates.

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<sup>9</sup> Sweden has a total population of 9 million people, the Czech Republic 10 million. Sweden's largest environmental NGO has approx 170 000 members (Swedish Society for Nature Conservation, 2003)



But in regard to actual work in relation to the “outside” community, relatively little has so far been done. Certain activities have been held outside the school, such as the so-called “School in Nature Week” organised by the school in co-operation with other village schools, as well as some similar small scale projects and activities.

So far, the efforts of the school are basically solely initiated by, and dependent upon, the employees of the school and the pupils themselves. Since the support from other sources is so limited, the teachers have to allocate some of their spare time to plan and implement projects. As an example, in the “School in Nature Week”, the teachers were there the whole week, but only paid their regular daily wages.

Although the pre study showed that this school had come relatively far in the integration of environment and sustainability in their education, there is still a lot of work that can be done. “The school is not open enough to the community” is a comment that has been repeated by the school staff themselves as well as by outside community members. Another finding in the pre study, which has been confirmed by this study, is that the school’s teaching staff have a clear commitment to change and develop the Education for Sustainability skills further.

### **3.5 Evaluation of conditions**

The following section is an analysis of the findings in relation to the internal and external conditions of Zákolany School. It is a combined analysis, based on the findings of interviews and the workshop conducted with the headmistress and the teachers of the school. The conduct of the workshop and its results are further explained in Appendix 3.

#### **3.5.1 Internal conditions**

According to SWOT as an analytical tool<sup>10</sup>, the *strengths* and *weaknesses* are the aspects that are related to the internal aspects of an organisation. The following chapter gives a summary of the relevant factors found in relation to the internal aspects of Zákolany School.

##### **3.5.1.1 Structures**

As the focus is not on internal teaching aspects and abilities, this is only a brief summary of what the school and its stakeholders perceive as positive and negative with their structure.

As a small primary school with flexibility in relation to the composition of classes, the school provides good opportunities for change. There is not yet any clear specialisation of teachers, such as at secondary – or tertiary levels, which could complicate changes in the system. The cross curricular learning is considered a corner stone in the concept of EFS, and is probably easier achieved in such a structure, as the one at Zákolany school.

According to Symmons (1996, p 58) the primary years are important, as the children are curious and open to the world and they are not yet limited by certain attitudes and

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<sup>10</sup> SWOT is a well-known analytical tool, often used in businesses in mapping their internal and external conditions. SWOT is an abbreviation of Strengths, Weaknesses, Opportunities and Threats. These four categories then are the basis for the analysis of relevant factors and trends.

stereotypes. As is pointed out in the case of Pumpherston in Scotland<sup>11</sup>, the actual things achieved in the process may appear small from the adults' point of view, but can have very large effects on the children's attitudes and values, and then specifically their view on the environment in which they live, both from a human and a natural perspective (University of Edinburgh, 2003).

From the practitioners' perspective though, the combined class system is time consuming, as it requires a great deal of pre class planning. On the other hand, the pupils have the possibility to be more flexible in their individual working pace.

As the school only provides education for the children from year 1 till 5, they provide neither kindergarten, nor the last four years of compulsory schooling. Both these factors can, and do, according to the parent interviews, act as a barrier for parents when choosing schools for their children (Parent 1, 22 June 2003; Parent 3, 26 June 2003). It also results in less funding, and less flexibility due to limited number of teachers in the school.

### **3.5.1.2 Human resources of the organisation**

"There is definitely no problem with the human capital" states the headmistress, referring to the commitment of the other practitioners at the school (Bulánova, 23 June 2003) The internal interviews and discussion, as well as interviews with stakeholders and the local authority support this statement. The fact that the practitioners use a great deal of their spare time, unpaid, to provide the pupils with activities, is just one example of their dedication.

On the other hand the headmistress has clearly stated that there is a lack of competence in certain areas within the organisation, such as knowledge on economic and managerial issues.

The background of the teachers differs, from traditional teachers' education to a degree in psychology. This is viewed as positive both internally by the teachers themselves, and was mentioned as something very positive by interviewed stakeholders (Workshop, 27 June 2003; Parent 4, 26 June 2003). In general the teachers attitudes and the atmosphere of the school is perceived as positive, both by parents of children in the school and outside parents (Parent 1, 22 June 2003, Parent 2, 26 June, 2003; Parent 4, 26 June 2003).

### **3.5.1.3 The schools physical facilities**

The school facilities are unfortunately relatively worn down. The exterior of the school such as the facade of the building and the school garden is in obvious need for renovation. The interior of the school is in a relatively better state, but the school's dining room is considered in need of an upgrade. Furthermore, the school is not yet equipped with showers, which is considered to be a priority among the staff, and which also may soon be required of the school by law (Bulánova, 23 June 2003).

The school is in relative terms very well equipped with computers and Internet access. There is one computer available per 3 pupils at the school, and the teachers also have access to computers, printers and Internet access in the office. The equipment is a result of an IT project that the school was part of. The only negative aspect in relation to the IT equipment,

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<sup>11</sup> Reference to Pumpherston primary school, in Scotland, can be found in many resources for EFS. It is considered a pioneering school, as it started already in the 80's to actively work in the local community with environmental and social issues.

is according to the headmistress, the need for more knowledge on IT, for her personally as well as among the other employees (Bulanová, 23 June 2003).

### 3.5.2 External conditions

The external conditions are, in contrast to the internal, not primarily steered by the organisation. They are the *threats* and *opportunities* originating from the organisation's external environment, to which they should adapt or try to find a way to influence.

#### 3.5.2.1 Existing stakeholder expectations and possible trends

As with any other organisation, one's *raison d'être* is partly defined by the stakeholders. The main stakeholders in the case of the school, apart from the children themselves, can be considered the parents. Especially, since the system is now providing the parents with the possibility to freely choose schools, the importance of meeting their expectations is more evident than earlier.

The conducted interviews with parents as well as managers of other schools show a clear trend of focus on the quality of the education. Quality aspects are then be considered to be teaching methods, availability of second and third language education, sport activities offered and international co-operation etc. More practical aspects such as the accessibility of the school are decreasing in importance. Aspects like environmental and social issues are still not on the top priority list of the parents, but are increasing in importance according to Kulich (1 July 2003).

Also there are higher requirements for commuters in relation to the opening hours of the school. As these parents often leave early in the mornings and come back late in the afternoons, they expect the schools to have both before – and after school care (Vaňková, 29 August 2003). Also there is a need for a kindergarten, both as the school stakeholders would prefer them to have one, but also since there are more children in the region than there are places at other kindergartens.

The stakeholders' view on the education in the school does not fully respond to the view of the teachers. As an example the combined class system is perceived as problematic by the stakeholders, but not by the school staff themselves. Also the communication of the school to the potential parents is lacking, which was identified both in the parent interviews and by the school staff.

The Czech school system has an important effect on the behaviour of the schools' stakeholders, especially the parents, according to Mrs Nováčková (4 July, 2003). According to her it's the largest barrier to changes in teaching methods in Czech Schools. Even though a school changes, the entry examination for the secondary school are still along the traditional lines. Therefore, the parents, out of fright that their children will not pass the exams, are monitoring schools so that they don't become too experimental and rather stick to regular marking methods.

The actual involvement of the parents in the school's activities, even when specifically asked for help or some small contribution, is very limited (Bulanová, 11 June 2003; Workshop, 27 June 2003). Interviews with other neighbouring schools indicate that it is a general situation in the villages of the region (Kohoutová, 25 August 2003; Komarková, 29 August 2003; Vaňková, 29 August 2003).

### 3.5.2.2 Financial structures and potential for financial support

The local government is the owner of the school building and is the main financial source for the school. The interview with the mayor revealed that there is no guarantee that the school can get financially rewarded for any changes that they make in relation to resource use. The idea of the school being able to save money on e.g. energy and water, and reallocate those resources to education could only be an issue for discussion, not something that the municipality could promise (Černý, 22 June 2003).

There are grants programs from the ministry of environment and education. They are said to be increasing, but still limited in regards to the actual amount of financing. Also, the regional government has the possibility to give “earmarked” grants to schools for different activities and projects. According to Mr Jiří Kulich at the Environmental Education Centre (Kulich 1 July, 2003), the grants directed towards education for environment and sustainability differs a lot between regions. The interview with the head of the educational department of the regional government (Coufal, 1 July 2003) showed little signs of such efforts from the Central Bohemian region. Funding could possibly be found in other funds, such as cultural heritage fund, or funds for free time activities depending on how the projects are defined (Šorm, 17 July 2003). What seems to be a general observation is that grants are more likely to be distributed to associations, such as an association of schools, rather than to single schools individually (Kulich, 1 July 2003; Tomek, 16 July 2003).

The fact that the NGO’s are still relatively few and small in the Czech Republic, limits the sources of funding available from that direction. As an example, in other countries, such as the UK, the World Wide Fund for Nature (WWF) has been an important contributor to Environmental Education (WWF, 2003; Appleby, 16 May 2003). There is no WWF in the Czech Republic. Also the promotion of a systematic management approach to environmental work in European schools has been to a large extent driven by the Eco-schools system (Eco-schools, 2003), or other country specific methodologies. The Czech Republic does not yet belong to the Eco-schools system. According to the central Eco- schools organisation there are negotiations with a couple of Czech NGO’s to enable them to join (Ronneke, 30 June 2003). During the review, no other countrywide, or region wide, program was found.

Grants from the European Union have already been given to accession countries to enable them to work towards compliance with EU standards. It is believed that further funding can be received as the Czech Republic joins the EU. Also, in the case of the EU, grants are often distributed to projects, not so much to individual organisations as such.

The coming reform from the ministry may put a certain amount of pressure on the school, but so far the support from the local community seems to continue. The trend of decreasing number of children may continue if the village does not attract more families. The Czech Republic does show signs of a rapid postponement of child bearing since the 90’s (Billari and Kohler, 2002).

### 3.5.2.3 The support from policies and expected future policy trends

The general view of the local government is that it is the owner of the school as such, and therefore, takes on the role of a formal owner, rather than actively managing it. The local government appoints the headmaster/headmistress of the school, but the management of the school is thereafter, to a great deal, up to her/him. In the board of the municipality there is a member who is officially responsible for the Education and Cultural aspects of the

community. But in concrete terms, nothing specific is currently being done in relation the school (Černý, 22 June 2003).

“The word “added value” is not known here” states Mrs Nováčková, (4 July 2003), who is actively promoting interdisciplinary learning in Czech Schools, when asked of the policy support for such changes. As Education for Sustainability in general also implies changing in teaching methods, the authorities view and policies in relation to educational change in general is also of interest. In this case, as stated by Mrs Nováčková “there is a certain trend forward, even if the trend is slower than hoped for. There is no turning back, that’s for sure“ (Nováčková, 4 July 2003).

With the adoption of the SPEVVO plan, the Czech Republic can be considered as having made an important step in the direction towards the integration of sustainability in policies. It is above all interesting that “support for co-operation of schools with the extracurricular sphere – with the family, with the municipality, with enterprises (...)” is considered a main target (Ministry of Environment, 2000). On the other hand the interviews clearly show that there is no clear plan of how to implement the ideas found in the national or regional strategy plans. Much of the responsibility is left to the regional government, on which then the actual support of implementation becomes dependent. The regional government in turn leaves the main responsibility to the local authority. This finding is clearly supported by the conducted interviews, with the different levels of government, NGO’s, as well as the school itself. Mainly, the idea of Education for Sustainability is believed to be living in the documents, and in the work of individual schools, but with no formal co-ordination between those efforts.

In the development of environmental and sustainability related strategies on the level of national government, representatives of NGO’s are invited to join the consulting committee. Such a co-operation may further enforce the trend. (Kulich 1 July 2003, Kvasničková; 3 July 2003, Jech and Boušková, 5 September 2003).

Interviews conducted with both authorities and NGO’s suggests that there will be more policies – based on EU directives in relation to promotion of Education for Sustainability. But the Czech Republic has taken a governmental decision, to only focus on the *minimum* requirements of the EU standards, and does not allow the ministries to embark on more proactive projects (Kulich 1 July 2003, Jech and Boušková, 5 September 2003).

Also, other aspects of schooling may require changes. A report on the key data on European Education shows that the accession countries, in general, are lagging behind in relation to several educational aspects. As an example the Czech Republic teachers’ salaries are at a minimum of 55.7%, and a maximum of 130.2% of the national per capita GDP. In other member countries it ranges from 64,6% to 331,5%. Also the integration of children of foreign mother tongue is mostly done without linguistic support, which on the other hand is a more common measure in the EU (Eurydice, 2002). Furthermore, the EU has already criticised the Czech Republic and other accession countries for their poor results in the integration of Roma inhabitants (The Guardian, June 2003).

### 3.5.3 Location and facilities

The physical location of the school has its benefits as well as its drawbacks. The school is located in an area of Bohemia with beautiful scenery. In the vicinity of the school, there is the historical sight of Budeč. The village of Zákolany is also in commuting distance of several

larger towns, such as Kladno (70,000 inhabitants), Kralupy (40,000) as well as the city of Prague (1,200,000 inhabitants). Which can be both a benefit and a problem. The fact that the school is centrally located, in relation to the other surrounding village schools, is according to the mayor (Cerny 22 July 2003) a certain privilege. The locations of the villages belonging to the municipality of Zákolany is shown in Appendix 7.

The school is situated in a two-story building dating back to the 19<sup>th</sup> century. In the school there are two classrooms, one teachers' office, a sport hall and a dining room. In the building the municipality also has some office space, a municipality library and a fitness room. The building as well as its surroundings, including the school playground, is in relatively bad condition. The building needs outward restoration, and indoors there is a need for new equipment and facilities, such as installation of showers and improvements of the dining hall.

### **3.5.4 Community support and development**

The support in the local community is, so far, quite weak. In general Zákolany, as well as other neighbouring villages, seem to have relatively little interaction with community members, except for those with some type of relationship to the school, such as being related or close friends to those working there.

There is a certain trend for more people to move in, according to the local authority, and there are efforts directed towards attracting more people, such as discussion on expansion of the village and similar plans are existing in the also in the neighbouring villages (Černý 22 July 2003, Komarková, 29 August 2003).

The environmental, social and economic issues discussed briefly in the start of this chapter, indicates that there are several issues that need attention. The region is suffering from environmental, social and economic problems. The school thereby, has an opportunity to be active in relation to the development of the community. As an example, the local community has a very limited amount of venues for interaction between community members. This may be an opening for the school to help establish more community feeling and sense of identity among the inhabitants of the village.

### **3.5.5 Other potential partners**

Zákolany School, in collaboration with another village school in Hrebeč, started an informal network for small schools. The idea for the network came up six years ago when there was a regional meeting for headmasters/headmistresses of all schools, including large and small schools. In the meeting the small schools felt that their needs and problems were not recognised, which made them suggest that the small schools would continue to meet separately. There are now 19 schools belonging to the network, of which approximately 10 are active and 3-4 can be considered the main drivers of the network itself. It has evolved from being a co-operation involving only headmasters/headmistresses, to including all teachers and now also pupils. The co-operation consists of consulting each other when problems arise in relation to the administrative work, now as the administrative tasks have increased and are more complex. Some schools also have joint activities with pupils, and then the network facilitates transport and planning. (Bulanová, 11 June 2003, Komarková, 29 August 2003).

There are two other village schools in the neighbouring villages of Coleč and Otovice, in relation to which Zákolany, internally, has discussed the potential for more co-operation. The

deputy headmistress of Otvovice (Kohoutová, 25 August 2003) showed a general openness to the suggested networking possibilities. The more related to actual teaching methods or managerial issues, the larger are the barriers believed to be. The reaction of the headmistress of the school in Coleč was quite similar. As there are time constraints, their focus of co-operation would initially be on financially related issues. More urgent issues, such as the fact that all three schools are lacking qualified English teachers, was seen as a positive and welcome area for co-operation by all three schools.

There are a few active NGO's, with which Zákolany has some co-operation. This co-operation could on the one hand be developed further, but on the other hand the school seems reluctant to working with some of them for not specified reasons.

### **3.6 Case conclusions**

The school in Zákolany is evidently quite costly to run, as there are many teachers per pupil. On the other hand, the school, being so small, is able to create a family-like atmosphere that is appreciated by the employees as well as by the outside actors, such as parents and the local authority.

There is a threat of decreasing financing to the school, but as the local authority appreciates having a local school, the threat is not believed to be acute, for the time being. On the other hand, the survival of the school is very much dependent on the composition of the people of the board, which could change.

Along the ideas of the concept of sustainability, and consequently EFS, the initial findings show that there is potential for Zákolany School to work with the local community. There certainly are issues to address, environmental, social and economical. For this though there is relatively little support to be found in relation to policy level. The concept is used widely and increasingly in policy documents, both on the national and regional levels. The implementation of the ideas though are either not yet initiated, or in the cases where it is believed to be in the process of implementation there is no explicit method for monitoring the efforts or evaluating the success. The support differs from region to region in the Czech Republic, and the region of Central Bohemia is unfortunately, not one of the more proactive ones. The awareness of EFS on a local level is also very limited. It is important though to emphasise that the trend in relation to support and funding for the EFS type project seems to be increasing, especially through NGO's and national grant programs.

There is a consensus in the school among the teachers on their vision, which provides a good starting point for future success. The lack of support for those taking initiatives, which was considered to be a barrier in many other cases, is not a problem in Zákolany. There is clear support and recognition within the organisation, for those who take initiatives.

As the external support for their ideas is not as evident, there is an identified need to work more closely to external actors. Many of the misunderstandings between stakeholders and the school staff seem to originate from poor communication.

There are many potential partners for co-operation in the school's surroundings. Further work with NGOs, the local authorities, entrepreneurs, parents and other individuals of the local community are some identified examples. The task now is to find solutions to the barriers they are facing and ways to make use of the opportunities in their implementation EFS.

## 4. Learning from others

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*This chapter, first gives an overview of what can be learned from other schools' good practices. The interview studies with schools in Europe aimed at providing examples of how schools make use of external actors in their work, and how these connections have been achieved. Secondly, the chapter introduces the theoretical framework which is the basis of the analysis.*

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### 4.1 Good practice focus

The schools that have been in focus for this part of the study have been chosen according to two different criteria in consistency with the overall research purpose. Firstly, the focus has been on schools with an acknowledged work with environmental and other community issues. These schools were found mainly through Internet searches, certifying authorities and other organisations with knowledge of where good practices could be located. Secondly, the research was aimed at learning more from village schools that have made efforts to survive, and how they communicate the benefits of village schools, such as the mixed class system<sup>12</sup>. These schools were mainly found through certifying authorities, as the main aim was to find village schools which also fitted the criteria for good practice in relation to EFS. There have also been some interviews in relation to networking projects of village schools. The selected examples and their main characteristics are found in Appendix 6.

The cases relating to schools working with environmental and community issues, have had the following questions guiding the research:

- What has the role of the external environment been in general? Has it been used as a source of knowledge, has it been a part of the education given by the schools, or even a combination.
- What measures has the school taken to secure the support from stakeholders, such as parents, local authority and the community?
- How has the process been financed?
- Has the profile of the school helped them, and in that case how?

The cases relating to village schools and their strategies for survival has mainly been fixed on the issue of stakeholder relations and the use of partnerships: The underlying focus areas in the interviews and information reviews were the following:

- What partnerships and networks have been useful to secure the survival of the school?
- How have the benefits of the village schools been communicated to the stakeholders?

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<sup>12</sup> As the mixed class system is applied in Zákolany, but there is a certain external scepticism to its benefits, the school has specifically wished for insight in the experiences of other village schools in relation to this.



## **4.2 Experiences on Education for Sustainability**

The schools in focus have different labels for their work, but the essence is, in many cases, similar to that of EFS. Locating schools working with environmental issues in the countries within focus of the study was a relatively easy task. The interest in integrating environment in schools, and letting schools take a more active part in the local community, is certainly there. The following section summarises the characteristics of these schools' work, with focus on the support found in their external environment.

### **4.2.1 Methodologies**

The schools that have been interviewed were mostly using a certain methodology in terms of a certification system. Four identified systems are briefly explained.

#### **4.2.1.1 Eco-schools**

The Eco-Schools programme was started in 1995. It is managed by The Foundation for Environmental Education (FEE), and each participating country has its own co-ordinating organisation. The requirement for this co-ordination is that the organisation is non governmental. By the end of the school year 2001/2002 some 7000 schools from 23 different countries were a part of the network. This figure was believed to increase by 2000 schools in the following school year, 2002/2003. The programme is an environmental management and certification system for schools, and also with a focus on sustainable development education. It is promoted as an "ideal way to implement Local Agenda 21 in the school community (Eco-schools, 2003).

In order to acquire the certification, the schools must embark on a new project each year, following one of the themes in the system. In Sweden, as an example, those are Water, Energy, Closed Loop and Forest. The schools are audited each year (Åkerberg, 29 May 2003).

The Eco-school process consists of the following steps:

1. Establishment of Eco-school Committee
2. Environmental Review
3. Action Plan
4. Monitoring and Evaluation
5. Curriculum Work
6. Informing and Involving
7. Eco-code (equivalent to environmental policy).

(Eco-schools, 2003).

Step 7 specifically emphasises the need to inform and involve the local community. The schools are required to communicate continuously to parents and other stakeholders. The pupils also must be given the possibility to influence the process by being given access to the initial decisions, planning and implementation of projects (Eco-schools, 2003).

#### **4.2.1.2 Utmärkelsen Miljöskola [The Green School Award]**

This certification system is only used in Sweden. It was started officially in 2000 by the Swedish National Agency for Education. The criteria are classified in four main categories.

- A. General aims
- B. Activities
- C. Occupational health and safety, and physical welfare
- D. The physical environment

Primary schools must work with all sub criteria under category A and B, the relevant ones under category C, and a minimum of 15 (out of 43) under category D. This means, for example, that support from management (A1), practical/targeted work in the school and surrounding community (B2), outdoor activities (B5) and co-operation with other schools nationally and internationally (B4) are required criteria (Swedish National Agency for Education, 2000).

#### **4.2.1.3 Baltic Sea Project**

The Baltic Sea Project (BSP) was started in Finland in 1989, as a part of the UNESCO Associated Schools Project. It is a project that encourages schools in the Baltic's catchment area to work for a better environment, both specifically in relation to the Baltic Sea and with other general environmental issues (Swedish National Agency for School Improvement, 2003)

There are more than 200 schools in the BSP network, of which 60 are located in Sweden. The other countries participating are, Denmark, Estonia, Lithuania, Finland, Poland, Russia, Germany and Latvia. There are mainly secondary schools, but also some basic schools participating. In many schools the BSP has been organised as a joint effort including many subjects (Baltic Sea Project, 2003).

#### **4.2.1.4 Öko Audit [Eco Audit]**

The Eco Audit, used in two of the interviewed German schools, is also a type of environmental management system, originating from EU audit schemes. In the municipality of Münster, the decision was taken in 1997 to launch an energy saving programme. As a financial incentive, 50% of the savings are returned to the schools. The focus of this methodology is concentrated to purely resource related issues (Stadt Münster, 2003; Peter-Wust-Schule, 2001).

### **4.2.2 Local and regional authority support**

The interview studies show, that in most cases, the support from the local authorities has been very important, and beneficial. Although, the work is often initiated from a bottom-up perspective, its survival is depending on its support from the stakeholders, of which the local authorities are an important one.

*All interviewed schools experience some type of support from the local government in their work with sustainability issues. In most cases the schools have been the initiators of such collaboration. The support is often in terms of financing, but also development of projects and provision of materials.*

In Orsa municipality (S)<sup>13</sup>, the work with certification was initiated by the municipality which took the decision that all their schools were to be awarded either the Green flag of Eco-school or the Green School Award.

### 4.2.3 Examples of community interaction

Community action is often limited to the parents, and possibly the workplace of the parents. But there are some good examples of further community involvement, with clearly positive results.

*Actions such as cleaning of local rivers and lakes, picking of garbage in forests and beaches, are some of the direct activities mentioned in the interviews (Carlsson, 21 August 2003; Richter 21 July, 2003)*

Not only direct interaction, but also different forms of communicating with the local community and even further through media, has been found to be valuable. As an example Kumlabby School (S) are helping writing the local community newsletter on Visingsö, reporting on their environmental work (Göransson, 8 August 2003). Norrevångsskolan (S) (Gantell and Böös-Ivarsson, 22 August 2003) and specifically Bäckabo School (S) (Carlsson, 21 August 2003) state that the media has played an important role for them.

Thrussington School (UK) has also worked closely with the local community, and believes there will be long term benefits for the community as the message of environmental awareness gets shared (Pearce, 15 September 2003).

### 4.2.4 Parents

Like the case with the authorities, the support of parents is considered very important, but most importantly also a possible source of help. The general perception that parents not are easy to involve is similar in Zákolány and other schools. A lesson that can be learnt from the interviewed schools is that,

*Most schools stated that if the schools communicate well with the parents, and even require them to help, they often become interested and involved more easily. Once involved the parents tend to be very positive.*

There are many examples of schools that use the parents as a teaching resource. It often is connected to their line of work. Uppsävja School (S) use of one parent working in the Botanical Gardens (Weisner, 14 August 2003), and parents working in the local power plant and the water purification plant on Christiansø (DK) are involved in their Eco-schools projects (Jørgensen, 9 August 2003). The sources of help can also provide other things such as helping with the development and maintenance of the school gardens with the children's cultivation of vegetables etc.

### 4.2.5 Partnerships and networks

Most of the schools are part of some type of network, both in relation to their environmental work, but also in relation to other types of activities. Networking with international contacts is common in the group of interviewed schools.

*Networking is spoken of in a very positive way by all schools, and it is believed to be a great source of information, ideas and inspiration.*

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<sup>13</sup> S= Sweden, DK= Denmark, UK = United Kingdom, D= Germany

There are certain limitations to the networking, such as time constraints. In the case of international contacts there can be certain language barriers. On the other hand, several mentioned projects also include funding and training programmes. As an example the network of schools in the province of Dalarna in Sweden, is supported both by their local governments and by a resource centre (Quintino, 8 August 2003; Sandmon, 15 August 2003). The resource centre, Natur Resurs Centrum [Nature Resource Centre], provides the schools with meetings and seminars, and functions as a broker for the network (Sundvall, 10 September 2003).

#### **4.2.6 Other findings**

The schools in general, make sure that other staff, apart from teachers, are involved in the process. As an example, caretakers have been found very useful, especially in relation to internal sustainability efforts, such as energy savings and handling of wastes.

The larger schools, although having more people among who the tasks can be shared, show less activities relating to their external environments than the smaller village schools. The closeness to the local community seems to be beneficial also in terms of education for environment and sustainability. Also, it was evident in the small schools that the work with sustainability, such as through community projects preferably was made a part of the curriculum, in order to avoid increasing workload (Lyckander, 20 August 2003; Pearce, 15 September 2003).

Even if the schools, in general, didn't use the term Education for Sustainability specifically, they were applying many aspects of its principles. "It is all about learning by doing" as Mrs. Bjørn in Horbelev School (DK) expressed it (11 August 2003). It is also clear that when schools broaden their perspective and refers to it as education for sustainability, rather than environmental education, it seems to also involve more co-operation and actions in the local community. Sundvall (10 September 2003) also emphasises that the interest of the teachers themselves increase as the term sustainability is used, as the connotation of the word environmental education can be somewhat negative.

### **4.3 Village schools**

Many village schools across Europe, and surely many other countries world wide, are suffering from loss of pupils and the general trend towards centralisation of educational systems. The reasons are the general decrease in childbirth that has been considerable in Europe the last decades (Billari and Kohler, 2002), and possibly also the increased attraction of city areas. In Sweden as an example the number of village schools has decreased drastically (Skolporten, 1999) in the last few decades, with hundreds of village schools closing down. Some schools though have managed to tackle this negative trend, and survived due to different strategies. The lessons learned from those schools are presented in section 4.3.1 to 4.3.5.

#### **4.3.1 Management**

All village schools participating in the study stated that they experienced high costs per pupil. Different managerial measures had been taken to tackle this problem, in order to try to secure the survival of the school. In Sweden the management of village schools is quite different than in the Czech Republic. There are examples of areas where one

headmaster/headmistress manages several village schools. He/she then only works as a manager and budget adviser, not in teaching. The example of Valkärä-Hubertus headmaster district (S) shows how four schools can be centrally managed. The visited school, Håstad (S), offers schooling from kindergarten to year 3, the children thereafter leave for another school in the headmaster district. The schools in the district share care-taker, music teachers etc. as they strive to provide full-time employment (Salomonsson, 17 September 2003). Hunge School (S) is also part of such districts, and so are Bäckabo School (S) and Trolle Ljungby School (S).

*The centralised management of the village schools is believed to have both its benefits and its drawbacks. The schools are happy about being relieved of the actual administrative work, but at times dissatisfied due to fact that the headmaster/headmistress is not in daily contact with their workplace.*

There is an alternative type of management of schools, and mainly in the case of kindergartens in villages, called parent co-op. The schools are entitled to a certain amount of financing, which is transferred to a board of parents, who are given the responsibility for recruiting teachers, the economic and administrative tasks as well as the development of the curriculum direction.

*There are also examples of schools sharing teaching resources to lower costs for personnel.*

In Håstad School (S) the teacher for children with special needs is shared with another school (Bernat, 19 August 2003), and in the province of Jämtland one of the uses of their IT network is to share language teachers through distance learning (Flood, 14 August 2003).

### 4.3.2 Networks

The experiences of networking among village schools show signs of both great success and complete failure. In the sparsely populated areas in the north of Sweden, two such projects started in the late 90's. In the province of Jämtland the IT-based conference system Z-online quickly became a success, and today has over 20.000 users (Flood, 14 August 2003). Some of the interviewed schools are members of the network and use it frequently. The system was started as a project to connect village schools, but now also includes local authorities, international partnering schools etc. (Nilsson, 20 August 2003). A similar project in the county of Västerbotten failed. It was initially funded by the European Union and also had the aim to connect village schools. It failed because the local authorities were not prepared to fund it further, and the schools had not understood the benefits of the use of IT (Eriksson, 19 August 2003).

Also Kumblaby School (S), situated on the island of Visingsö, was introduced to a EU funded project of connecting island schools in Sweden. The project failed, but the school then started co-operation with another island school, at their own initiative (Göransson, 8 August 2003).

Some schools also work in co-operation with the schools to which the pupils will leave (Nilsson, 20 August 2003; Carlsson, 21 August 2003. In Håstad School (S), the pupils also communicate with a larger school, in order to learn about issues that they are not themselves confronted with, such as the understanding of immigrant integration (Bernat, 19 August 2003).

*In conclusion, all village schools do have some type of co-operation with other schools, but the project in Jämtland is the only example found of a more formally organised network.*

### 4.3.3 Community awareness and contacts

“The school shouldn’t be kept *per se*, but because the practitioners, pupils, parents and community are proud of it being there” stated the headmistress of a small village school (Nilsson, 20 August 2003). This quote speaks for the findings from most of the village schools in the study.

*Just as with the schools interviewed regarding education for sustainability, most village schools found that their success was, to a great deal, depending on support from the local community.*

Håstad (S) was an example of a school that also invited members of the local community to teach in the school. E.g. they had a historical theme at the school and invited people from three generations to come and talk about what the school was like as they attended it (Bernat, 19 August 2003).

“The village school should be seen as a part of the local community, not as an isolated island” was one of the main recommendations by Bäckabo school (S), a school which can be considered as having managed very well to find external support, both in terms of financing and teaching input (Carlsson, 21 August 2003).

Many of the village schools felt misunderstood by the local authorities, but thereby also saw the co-operation with them as even more important. In many of the village schools such co-operation was related to their environmental work.

*The co-operation with the local authorities was, in many cases, considered quite difficult, but necessary.*

There was also the example of small schools that had co-operation with the wider community, outside their village. One school has worked with the college in a neighbouring town (Carlsson, 21 August), and another school has worked in environmental projects with larger corporations such as Marks and Spencers and Volvo Cars and Trucks to mention a few (Pearce, 15 September 2003).

### 4.3.4 Parents

The support from parents was always evident when the schools were threatened to be closed down. The parents then, in general, became upset and helped develop solutions to the problems.

*Some schools have also managed to get continuous support and involvement of the parents. In several cases the parents were also involved more directly in relation to school activities, and in teaching*

Parents have as example invited the children to their work place (Jørgensen, 9 August 2003), or they may come themselves to the school and teach or help with other activities (Bernat, 19 August 2003).

In most schools the parents had a parent board where they met with the teachers to discuss any concerns of theirs and the general development of the school. This board would then deal with parent-school relations, such as their view on how the school should be organised and what the teaching could consist of. There were great differences in the actual involvement of the board in the different schools.

Bäckabo School (S) showed signs of inventive thinking and focus on the involvement of parents. The parents had been found to often associate schools with a negative experience. Therefore the parents were invited to be pupils for a day. They were given homework, took

the bus to school and attended regular classes, without the children being present. The feedback from such efforts was clearly positive (Carlsson, 21 August 2003).

### 4.3.5 Other findings

The village schools showed the importance of flexibility. As an example they tried to keep as many classes as possible to get enough pupils, but on the other hand at times had to not have a certain age group at all, if there weren't any pupils or a too uneven distribution of boys and girls.

*Most importantly the schools emphasised the need to have a kindergarten to ensure that there is a natural passage for the children from kindergarten to the school, as well as to increase the chances of pupils staying.*

In some schools the kindergarten was a part of the school and in others it had been closed, but continued to be run by parents in a parent co-op (see 4.3.1).

## 4.4 Conclusions from interview study

There are some differences in the focus of the methodologies used for managing the environmentally related activities in schools. In regard to the use of, and communication with, external partners, it is encouraged in all four types of management methodologies encountered in this study. In BSP it is clearly necessary as the whole project builds on networking between schools. Eco-schools and Umärkelsen Miljöskola [Award for Environmental School] list it as a requirement for certification. Although Öko-Audit [Eco-Audit] clearly is more focused on traditional environmental education, the German schools were active in their local community at their own initiative.

There are many similarities between the interviewed schools, and the case of Zákolany. Like in Zákolany, many of the schools' environmental work was initiated by teachers, and support from other actors consequently had to be achieved through their continuous efforts to convince stakeholders of its importance.

The findings of the interviews can be related to the proposed framework for categorisation of external actors. This led the author to develop a brief summary of the lessons that can be learned from these interviews.

- From an *inward educational perspective* there are quite a few of the interviewed schools that have received input from actors in their external environment, and participated in different types of network settings.
- The *external perspective* is slightly more limited, but also here there are some good examples. Sharing experiences with other schools, such as within the Eco-schools network, is one such example. Working actively with the municipality can also be considered a way to apply the knowledge in an external setting and also then possibly influence the further work of the authorities.
- The financing is a common limiting factor, and the *inward financial aspects* are difficult to manage. It seems though, that as this is, to a large extent, depending on the limited time resources available for looking for grants and finding help from external actors. Therefore, such support is normally coming from local governments and parents. Several of the schools have parents or other community members helping with their

facilities, such as parents helping in school gardens etc, which is one of the *inward physical aspects*.

Apart from the external networks, there are some other factors that can be of use for Zákolany. The cases show that there can be benefits for the individual schools by having the profile as a school that is in the forefront of environmental and social work. Especially the outdoor teaching and the focus on individual plans for the pupils have been found to be beneficial. In relation to the village schools, the fact that the schools are small, and have a mixed class system is perceived as positive attributes. For example, the practitioners can have a more friendly and close relation to their pupils, as well as to their parents. There certainly were double benefits of community interaction for the interviewed village schools. It not only helped them with their environmental/sustainability work, but strengthened their position in the local community.

Village schools are obviously depending on a lot of external factors and actors, despite their internal efforts. Stable support from authorities and the local community is what they strive for. The examples of village schools studied, clearly show that the level of success in ensuring continuous survival is through active communication and interaction with stakeholders. Networks have also been shown to be of value. But lessons could also be learned from less successful examples. The example of “Village Schools in Co-operation” illustrate that it can be a difficult task to start a network, especially depending on IT, if there isn't a certain openness for change and competence enough among the practitioners to use it properly.

With the lessons learned from other schools in Europe in the luggage, it is now time to explore further how previous research can be of help in finding successful ways for the school in Zákolany to advance in their strategic work.

## **4.5 Theoretical departure**

### **4.5.1 Introducing the journey**

As was discussed more thoroughly in the introductory chapters of this thesis, Education for Sustainability has developed as a method in teaching, and activities of schools, increasingly over the last few decades. It is clear that there is support for this movement on an international, and in many cases national level. A more general, widespread, implementation of it in schools though does not seem to have happened.

This research focuses on how, from the perspective of individual schools, and their surrounding communities, a change in a school's role can help achieve this change. Departing from Zákolany, via the findings from the interviews with other European schools of good practice, the destination of this chapter is a summary of the theoretical framework that has been found useful. From this framework, it is possible to further analyse the case of Zákolany.

### **4.5.2 Supporting structures**

There has been previous research focusing on what it is that drives schools to integrate environmental and sustainability issues into their organisation's activities and curriculum. As the international conferences and developed policies, such as Agenda 21, seem to be more frequent, an intuitive guess would be that such changes are driven by policies. However



recent research within the field of sociology of law has shown that it is the internal commitment, with the support from external actors such as NGO's and other committed partners, that are the main drivers of such change (Wickengberg 1999; Axelsson 1995). This is illustrated in Figure 7.

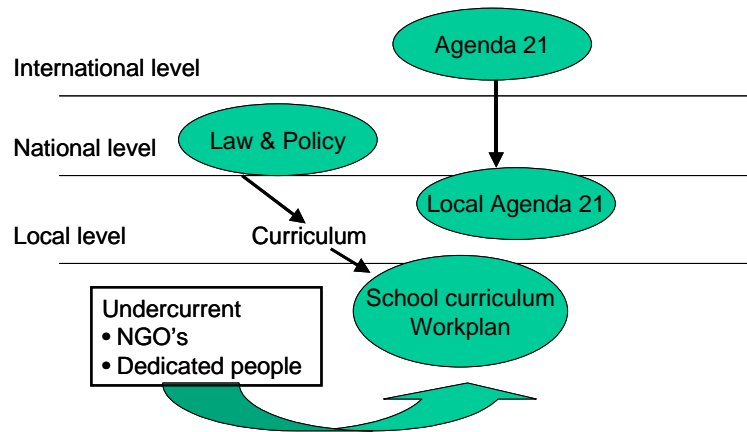


Figure 7 The support structure for schools in their environmental work (Wickengberg, 1999)

According to Wickengberg (1999) there are influences on schools' environmental work, coming from different levels of society. His study on the Swedish system has many similarities with the findings of this study. As shown in Figure 7 there are not only top-down policies from different authority levels, but also a so called undercurrent consisting of dedicated people within the schools and other dedicated actors in their environment, such as NGO's. According to Wickengberg's study (1999) the undercurrent was shown as vital for the process of education for the environment. The pre study conducted for this research clearly supports that it is mainly the dedicated people in the schools that have initiated and drive this movement.

It is of importance though to understand that this particular model was developed in relation to schools in Sweden. The different conditions between countries also imply that Zákolany cannot expect to be able to replicate the strategies of other schools of good practice. As in this case the study is conducted in the Czech Republic, where the policy environment in relation to EFS is found to be relatively weak it may be of benefit to use a different type of approach. The current implementation of Local Agenda 21 or equivalent measures are also very limited. Therefore a broader perspective on stakeholders and other actors is found to be preferable.

### 4.5.3 Business drivers

Even though the school can expect further financial support from the local government, village schools are under a certain threat, in case of change in financially related policies and due to their dependence on the actual composition of the board of the municipality. So the ability to increasingly finance themselves, and find more support from stakeholders could increase their stability as an organisation. Parallel to this change, is the vision of becoming a school also internally applying a more sustainable attitude in their activities and teaching.

Therefore, the focus of this analysis could be made wider, than in the case of more curriculum related research and research focusing on internal structures. Rather than solely focusing on models such as the one in Figure 7, a more business-oriented perspective would be useful. Parallels between schools and other organisations going through a change of “greening” could be drawn. Research shows that there are a number of drivers for such change in the business sector (e.g. Reinhardt, 1999; Roarty, 1997). Also Hoffman (2000) has done research focused specifically on such drivers and developed a model for mapping them. The drivers are shown in Figure 8.

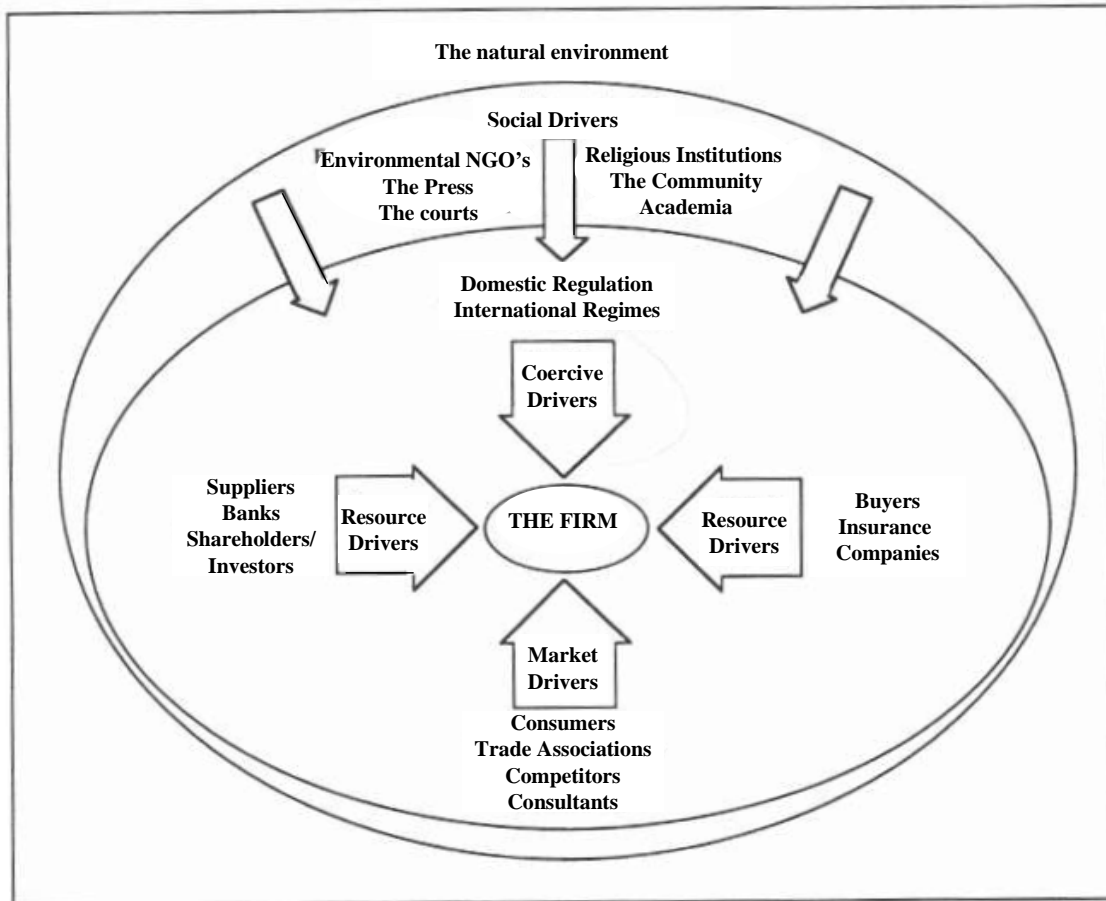


Figure 8 Drivers of Environmental Strategy (Hoffman, 2000).

As can be seen in the model, Hoffman relates the drivers for greening of business to a wide range of influencing actors. In the case of public organisations, such as schools, some of the actors may be less influential. On the other hand it may give the school an advantage in the fact that, although they may not be as closely monitored as e.g. a polluting industry, they have the opportunity to use certain actors for their purposes. The model is used in further analysing Zákolany’s case in Chapter 5, as it gives an initial insight to the fact that there may be many different stakeholders to acknowledge, for different reasons and for different functions.

## 5. Analysis – External focus

*This section is an analysis of the case of Zákolany, and the potential for a strategy involving external actors is linked to relevant theory.*

### 5.1 Zákolany School – from a business perspective

Sterling (1996) divides the strategies of sustainability in relation to education into two main models, the instructive and the constructive. The instructive is a top-down approach through which the education is seen as a “tool of public policy”, and therefore, complementary to other measures such as economic instruments and regulations. The constructive approach, on the other hand, is of a bottom-up character, where the process is commenced within the schools themselves. The strategy chosen for Zákolany is clearly of a constructive character, as the hope is put into the possibilities of local change. This supports the findings of Wickenberg (2000).

In the case of Zákolany, the policy level was even found to be weaker than in Swedish schools. The national level has begun a more active policy process, but the implementation of Agenda 21 on a local level can be considered very weak, with only a few known examples in the Czech Republic (Reitschmiedová, 2002). The external undercurrent is also relatively weak as the NGO culture is relatively new. There is though a promising increase in the number of environmental NGOs (Charles University Environment Centre, 2000). The internal current, i.e. the dedication of the practitioners, is what has initiated and supported the process so far and can currently be considered the main driver.

#### 5.1.1 Understanding drivers of Zákolany School

Using the categories of Hoffman (2000) the following drivers for sustainability have been identified:

*Table 2 Hoffman's drivers (2000) applied to the Zákolany School*

Type of Driver	Description	Zákolany
<b>Social Driver</b>	<p>This includes the societal views and values. It comes from religious institutions, environmental associations and so on.</p> <p>The values can also be depicted through events such as court rulings.</p> <p>These drivers can be considered as norms, which can affect other drivers.</p>	<p>NGOs have a certain influence on policy making.</p> <p>NGO's give support to schools in EFS.</p> <p>Weak support for NGO's in terms of number of members.</p>

<p><b>Coercive (Regulatory) Drivers</b></p>	<p>These are regulations and policies originating from all authority levels, from international to local.</p>	<p>EE and EFS policies, International agreements, EU policies.  Limited direct implementation in the Czech Republic.</p>
<p><b>Resource Driver</b></p>	<p>Economic stakeholders. From up – and down the supply chain, as well as financial supporters such as insurance companies and banks.</p>	<p>Funding from local and regional government.  Possibilities of grants for EFS and other projects.  Parents not actively involved, and no additional financial support.</p>
<p><b>Market Driver</b></p>	<p>Actors <i>outside</i> the supply-process-distribution phases of an organisation.  E.g. consumer interests, competitors.</p>	<p>Other schools, especially in larger cities compete for pupils.  Limited requirements on environmental and social performance (parents, other community members).</p>

As has been discussed earlier, important stakeholders such as parents are not yet listing Education for Sustainability as a priority for their children. The parents though, as was clearly shown in the good practice cases, comprise a large potential force for change, if they support the idea. Therefore, in the case of Zákolany it may not only be a question of learning about the existing drivers, but to actually try to strengthen some of them. Through being more active in the local community, the social driver of the community members and also other drivers may be enforced in their favour.

According to Dunphy (2000), there will be significant changes to the prerequisites for all organisations in the future, regarding environmental issues. Progressive efforts will pay back, such, as through being able to attract skilled employees and more customers. This is supported by the findings in regards to Zákolany. Though, in order to speed up the process of increased environmental awareness and expectations, and to find earlier rewards, the school should be focusing on close interactions with stakeholders. This is explored further in the following chapters.

### 5.1.2 Outreach as a response to drivers

So parting from the framework from Hoffman (2000), we also find that there is a further potential for Zákolany School, related to the principles of EFS. As the school has decided to take on a different role in the local community, it implies that the drivers do not necessarily have to originate from the stakeholders’ initiatives, but may even be affected by Zákolany’s work.

The fact that the role of Zákolany School will be somewhat different in the future has partly started in the organisation, in terms of including it as a part of their vision. The goal is now to find a way to connect the drivers, and make them steer in the same direction, as the school as well as adapting to them, in the implementation of the strategy.

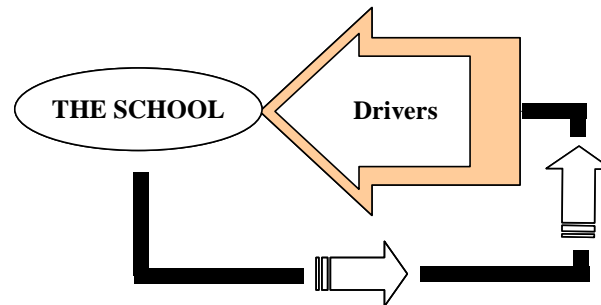


Figure 9 Enforcement of beneficial drivers through the outreach of the school

Relating back to Hoffman (2000), the drivers, such as the social drivers in the local community, could be further enforced by the school itself. The central idea of this project has been to understand the drivers and the potential in those drivers. This as the prerequisites for the organisation are believed to become more and more of those for a business, rather than those for a public sector organisation. The following discussion centres on the support for their vision of what forms the change could take, and how the school actively could affect other's perception of it.

### 5.1.3 Stakeholders and organisational identity

A central idea of this project has been for the school to find a corporate vision for the school. The research has also focused on the potential in finding synergy between the school's vision and the stakeholders' expectations. The change process of the school will most certainly have implications on the practitioners and external actors' perception of the school's identity.

The classical definition of organisational identity is often considered the one of Albert and Whetten (as cited in Scott & Lane, 2000; in Gioia, 1998) who stated that organisational identity is what is *central*, *distinctive* and *enduring* about an organisation. An organisational identity can be considered as the cognitive image of the organisation, as perceived by both internal members and outside actors.

Dutton & Dukerich (1991) developed a framework to explain how organisations not only change in relation to their external environments, but also are changing the environment. Departing from previous research on organisational identity in relation to organisational adaptation and research on impression management, they explored how organisations and their environments interrelate and change over time. Identity is according to Dutton & Dukerich (1991), how insiders look at the organisations and what it stands for. Image, on the other hand, is what the insiders believe that the outsiders see, i.e. what values the outsiders think the organisation represents. If the image is damaged the organisational members may feel a need to act, but identity issues may hinder the process. In the case of the school, others may have a perception of the school (an image), which the school is not aware of. The school must act in a way that their vision of a new identity, creates a positive image. According to

Scott and Lane (2000), it is when the stakeholders see an overlap between their own self-identity and the image of the organisation that they will identify with the organisation. This is why the issue of understanding the stakeholders and communication becomes central.

According to Collins & Porras (1998) the core ideology of an organisation is its character and thereby its self-identity. They also see these guiding principles as an identity that "requires no external justification" (p 222). Quite to the contrary, one of the main points in this research, and indicated through the proposed framework, is that as well as the image may change in the schools interaction with actors in its environment, so may their own identity. This is supported by Gioia (1998b), who sees identity as an "evolving, changing notion, developing over time in interaction with internal and external parties" (p 45). Returning to the concept of Education for Sustainability, it should be considered a natural process that schools' and communities' perception of what forms the local sustainable development could take, and their relative role in it will change as they interact with each other. The proposed framework for categorisation of stakeholders includes also such dimensions, as the goal is to both have input from external actors, as well as output towards them.

The profile that is created when schools are working with environmental and other community related issues has proven to be beneficial for the interviewed schools of good practice. As examples it has increased the interest of parents and local authorities, and in some cases also attracted less expected support such as from universities, businesses and individual donors. It has both changed the schools' identity, and through interaction with community members and authorities it has also created a positive image.

An identity that creates an attractive image, i.e. that customers and other stakeholders perceive the organisation as something positive, can have impacts on the reputation and further possibly lead to a source of sustained competitive advantage (Stimpert, Gustafson and Sarason, 1998).

#### **5.1.4 Scanning the environment – identifying stakeholders**

For the image to be a source of competitive advantage, it is necessary to have an understanding of who the actual stakeholders are. One must then acknowledge how they view the organisation and furthermore, how that view could possibly be changed, if necessary.

Through this research, different actors in the schools environment have been interviewed and discussed. But what makes an external actor a stakeholder, and why is it important for the school to be aware of it?

The definition of what constitutes a stakeholder or a stakeholder group varies between scholars, and between fields of research. Freeman's book from 1984 (in Davenport, 2000; in Kaler, 2002) is considered a starting point for stakeholder theory. He stated that stakeholders are those, individuals or groups that affect or are affected by the organisation in its quest to achieve its objectives. Since Freeman's book was published an array of different stakeholder definitions and theories have been developed. Mitchell, Agle and Wood (1997, p 853-854) calls it a "maddening variety", where stakeholders have been defined as "primary or secondary stakeholders; as owners or non owners of the firm; as owners of capital or owners of less tangible assets; as actors or those acted upon; as those existing in voluntary or involuntary relationships with the firm; as resource providers to or dependents of the firm; as risk-takers or influencers (...)"

Kaler (2002), parting from Mitchell (1997) distinguishes between three main categories of stakeholder definitions. Firstly the *claimant* definitions focus on the actors who may claim an interest in the performance of the organisation. Secondly the *influencer* definitions, as the name indicates, speaks of stakeholders as those having an influence on the firm. Finally there are definitions of *combination*, to which then Freeman can be considered to belong. The conclusion drawn by Kaler (2002) is that the *claimant* type of definition is preferable as it includes all aspects of the other two.

Several more recent authors also acknowledge a clear link between stakeholder theory and business ethics in forms of stakeholder responsibility (Bockaert and Vandenhove, 1998; Davenport, 2000). As the present day competition to a larger extent, also in the non-profit sector, is more quality related, then business ethics is becoming more of a strategic issue. The ethic performance of the organisation is then said to have two main categories of stakeholders, (i) the principal from whom the organisation is given its appointment and (ii) all other stakeholders, named “outside” stakeholders (Bockaert and Vandenhove, 1998). In Zákolany it is then the local authority who has the position as the principle and at the present mainly the staff themselves and parents who can be considered the main “outside” stakeholders.

The awareness of stakeholder expectations is relatively low in the school, mainly because the issue hasn’t been addressed in an organised manner before. Once again the change in the conditions, such as increasing stakeholder expectations, suggests a different strategy. Already at the start of the core project, the initial review and the workshop discussions opened up the practitioners view, and many ideas concerning the external environment were discussed.

As for now, most of the changes, such as parents taking their children to another town and the more thorough changes in their work tasks in the school, seem to come as surprises to the school in Zákolany. Thus, leaving them with a sense of discouragement and a sense of facing barriers. Dunphy (2000), states that this type of risk management approach is not the most feasible. The large, so called transformative changes, as a result of crisis, requires a lot of effort for redirection and repair. Instead a more constant monitoring of the environment will enable small efforts of repositioning and innovation, and quickly steer the organisation back on track.

### 5.1.5 Consulting and involving stakeholders

This project, and the proposed framework, builds on the idea that stakeholders need to be considered and consulted as the school goes through its change process. Without their support, the change may lead to a negative result. In accordance with Kaler’s (2002) conclusions, there may be increasing *claims* on the organisation, and it is important to understand what they are.

A concrete example of the importance of knowledge about the stakeholders was given by Mrs Nováčková (4 July 2003). The example was of a school, which had, after approximately 10 years of work with EFS, been forced to change headmistress due to the negative feedback from the parents and the local community, who felt they had not been consulted.

According to Gioia (1998b) the need to incorporate the view of external actors in management’s vision implies new challenges. This as the line between the internal and external parts of the organisation, which often have been institutionalised in organisations, becomes weaker. Thus for Zákolany it is necessary to ensure that the people of the

organisation become more aware of the opportunities and also the potential barriers originating from outside of the organisation.

As a part of the vision is to open up their organisation and hopefully actively involve other people, the number of stakeholders will be more and hopefully the support stronger. Therefore, the future may increase the need for them to communicate differently and more intensively depending on the category of stakeholders.

As is suggested by the developed framework for categorisation of partners, there are two main dimensions in relation to stakeholder relations. Firstly, there is a group of stakeholders providing the organisation with something of value. The pupils, financial support or teaching input can be mentioned as examples. The second dimension is to be created by the school. This dimension involves more of an attitude taken by the school, the attitude of taking a wider responsibility in the community.

Consequently, these dimensions will determine the relative importance of the different stakeholders. But, in a longer perspective, as the stakeholder group becomes larger due to the second dimension, the expectations may change and also the claims of the stakeholders. It has been suggested that the strategies used by organisations, in relation to their stakeholders, are depending on the stakeholders' relative importance. This further indicates that the stakeholders that have access to resources that the organisation needs for its survival will be given more attention. Such stakeholders are considered "critical stakeholders" (Jawahar & McLaughlin, 2001 p 398). But relating back to the definitions of stakeholders as well as the idea of outreach, this should not limit the school's view. The stakeholders that hold the assets necessary for their survival, i.e. the local authority, may not necessarily have to be the main financial resource in the future.

As an example of stakeholders requiring different attention from the school are the parents. In the case of Zákolany, the parents are believed to be of two main categories. Firstly, the parents that need to be convinced to let their children stay in the village, and secondly, the more traditional parents of children from other towns who are more reluctant to move their children even if the quality is considered better. These two categories may then require different efforts from the school's point of view.

### **5.1.6 Stakeholder dialogue and reporting**

The studies of good practice clearly showed that in their cases, the issue of communicating and reporting to stakeholders was a natural part of their processes. In methodologies, such as Eco-schools and Award for Environmental School, it is also a requirement for certification. Also in relation to communication and reporting, schools could learn a lot from other types of organisations. The concepts of Stakeholder Dialogue and Stakeholder Reporting, developed for businesses as well as other organisations, can be seen as most relevant for the school. The stakeholder dialogue and reporting were defined in the so-called Copenhagen Charter.

The effects of the dialogue with the stakeholders are believed to be twofold. Firstly the dialogue can create *internal value*, as it increases the internal abilities to understand and make use of the stakeholder expectations. Secondly it is believed to have a strong *external value*. The external value can be summarised as follows:

Dialogue can provide the organisation with,



- more trust and openness for change;
- improved reputation;
- earlier warnings from the environment, enabling faster change in their response; (see Figure 10).

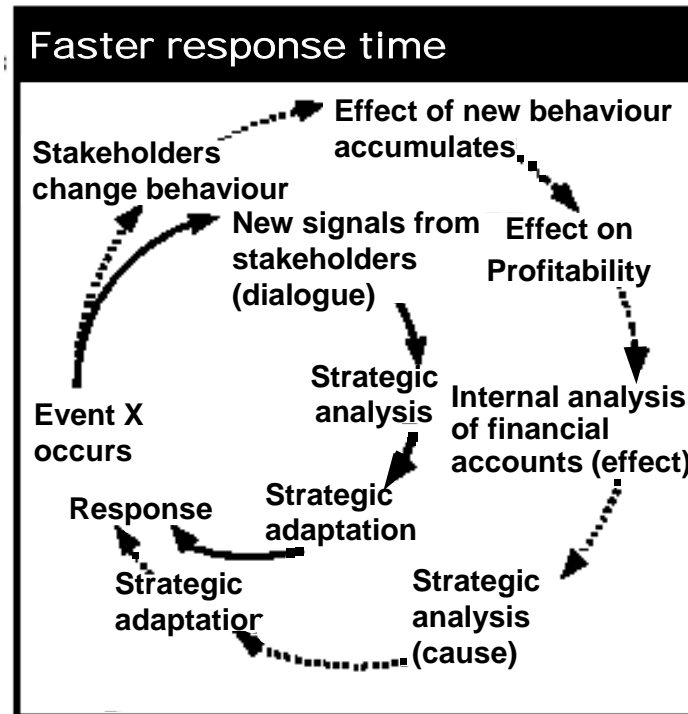


Figure 10 Stakeholder dialogue and reporting resulting in faster response time (House of Mandag Morgen, 1999).

Management and communication of the organisational progress and value has been identified as partly lacking in the Zákolany school. Thus improved stakeholder related strategies could be of *internal value* for the school. The development, and the continuation, of the dialogue would require a continuous awareness of their business environment. This could provide the headmistress, as well as the other staff at the school, with better managerial skills in relation to their stakeholders, such as the municipality, the parents and other actors in the local community.

The *external value* of the stakeholder dialogue in relation to the school is clear. Not only is the school not clearly aware of the stakeholders' current expectations, but also the stakeholders are not informed about the concept of Education for Sustainability or the possible value in the schools system. As the idea of stakeholder dialogue is two-way communication, the stakeholders and the school can reach a level of mutual understanding.

The expectations of the stakeholders in relation to the triple bottom line performance of the school will, according to the interviewed NGO's, increase. The younger parents interviewed for this study have also shown clear signs of focusing more on added value in schools, i.e. that schools offer more than what is traditionally required of them. These trends could be an opening for a first mover advantage for the school. As a part of the outreach in their strategy, the stakeholders could even be educated of the benefits of their education methods. The Swedish school in Bäckebo, which even invited parents for a day as pupils, proved it to be

very effective. Kometen, at Emanuelskolan is an example of a school that made a rapid change in direction of their practices, based on a very clear vision. Even though it turned out very successful, the teachers while reflecting on their methods through that change regret not having involved the parents more through discussions and thereby maybe even adjusting their vision.

### **5.1.7 One step further – The possibilities of networks**

Another step in working with external actors could be to tie them close to the organisation, through networking and other types of partnerships. Why would it be beneficial for a school to act together with others, rather than on their own? Well a network, or partnering, can be compared to any relationship between people such as a married couple. If working well it is of mutual benefit for all involved. Even though the relationship at times will be under certain strains and tensions, it will hopefully come out of its rough patches as an improved relation.

According to Axelsson (1995) there are many different perspectives on networks. A basic factor in all networks is that it involves both mutual understanding, as well as conflict. The characterizing of networks can be done in relation to how tightly they are structured, the hierarchical structure, the number of members in relation to the potential and so on. For the knowledge creating process research suggest that it is not optimal if the knowledge creation is dependent on one or a few individuals, the aim should be to increase the level of joint knowledge creation (Roth, Sandberg and Svensson, 2002).

An interesting point is that in Sweden the administration of the schools seems to be becoming more centralised, while the schools themselves are trying to be kept decentralised. In the Czech Republic, on the other hand, due to the decentralisation of the administrative workload, the schools may have to merge totally and thereby, the education system becomes more centralised. The formalising of the villages' school network could be a response to such tendencies, and aim at keeping the actual teaching of the children on a decentralised level, i.e. a school in each village. With the mere survival of the schools in mind, there are several networking benefits that could involve savings on resources etc. In relation to the EFS there seems to be potential for useful co-operation with other schools sharing the same goal.

An identified barrier in the case of Zákolany is that there is a need for some type of external support, not only for resource encouragement but also a source of inspiration and encouragement. Zákolany is a prime example where the efforts are depending on a few dedicated, but also very pressured individuals. Previous research shows clear benefits of such cooperation. According to Wickenberg (1995, s. 97), the network of kindergartens, in focus of his study, was of decisive importance for the environmental pedagogical work. It enforced the bottom up perspective. Also, in projects in Europe, the evaluations show that partnerships have provided valuable stimulus in curriculum development. From an international level new ideas were found, and from the local level partners gave an insight into what the curriculum suitably could consist of (Tilbury, 1999). These findings are also supported by the interviewed schools of good practice, which all were involved in some type of network, often initiated by the chosen methodology such as Eco-school, BSP and the Green Schools Award. So there is evident support for the idea of the school to become more actively involved in the schools' network, but also in the local community.

There are also certain possible barriers to start networking, which Zákolany has been an example of. The sense of risking something by opening up to co-operate, and thereby sharing visions and strategy, seemed to be an initial barrier. The reason is mainly that the

parents have a right to choose schools, and by starting to network the school loses the ability to be in direct competition with the other schools. In general there seems to be a certain resistance to change in the schools, even with obvious problems, and the positive responses were initially mainly related to purely financial benefits. According to Hoffman (2000) the resistance to change in organisations can depend on several factors, such as (i) habitual routine, (ii) resource limitations, (iii) fear of the unknown and (iv) threats to established power bases. It has to be understood that in such small schools as are in focus here, the headmasters/headmistresses are used to having responsibility, but also power over what is happening in the organisation. A network with other schools may be perceived as a bit threatening.

### **5.1.8 From theory to practice**

From a theoretical perspective, and with the findings of the interview studies, there is a great potential for Zákolany to work more with their current stakeholders as well as trying to establish more relations in their organisational environment. Especially, since they believe so deeply in their vision, while the belief among their current stakeholders is not yet as strong, some work with communication of their image will be necessary. Furthermore, working with the external actors is not only a necessity, but these actors may have great potential in helping the school with their work, and increasing the quality of the education. The question though remains, how can these ideas be put into practice and thereafter handled in a systematic way? With the findings it is now time to look more closely at the specific case of Zákolany, and what forms the work with stakeholders could take. In Chapter 6 the possibilities of further outreach in relation to EFS is explored and also a framework for categorising identified stakeholders will be discussed and tested.

## 6. Exploring outreach

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*This section is a demonstration of the application of the developed framework to the case of Zákolany. This in order to try to show how it can be of value for the categorisation of external actors, in relation to the different aspects of their vision. It is finalised by an analysis of the outcomes.*

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The conducted workshop with the teachers can be considered as the first main step from the more initial review, into the participative study. Departing from the result of the review, and the results of the workshop, the following chapter introduces the proposed strategies for the school, with focus on their external environment.

### 6.1 Introduction

From the analysis of the schools' external environment, with the input from the Workshop (27 June 2003) and the background initial review more specific strategic choices were explored. The interview studies in other European schools and study of theory provided further input in this process. A range of opportunities and possible projects were identified.

The internal limitations such as time constraints and lack of people, and the external limitations such as financial limitations and the scepticism of certain stakeholders, talk in favour of some type of prioritisation. This is clearly supported by the theories on stakeholder relations discussed in the previous chapter.

The prioritisation is then based on two main factors:

1. The aspects of the school's vision
2. The stakeholders' claims on the organisation (existing and future)

The vision of Zákolany School consists of many ideas, and is in need of some type of prioritisation in itself. As a contribution to the core project, three main strategies were developed. The developed framework for categorisation of partners and networks was used in the evaluation of each strategy proposal. And for each strategy the external factors barriers and opportunities were discussed. It is of importance to emphasise that these were mainly ideas of how the complex visionary ideas could be categorised. This does therefore not limit the chosen strategies and partnerships, as they can clearly be combined and/or changed. The main reason for this was to trigger a further discussion, and initiate a choice of priorities of the practitioners at the school.

### 6.2 Sustainable actions

As was initially discussed, there is not one simple answer to what Education for Sustainability should involve and how it should be implemented. In this research, the focus is on the connections between the school and its external environment could affect the process, and be affected itself.

Departing from the findings of the review of the situation of the school, and with the vision of the school as a guiding star, the following model was developed to map the possible

effects of the changes. The aim is to find a way that the implementation of EFS can enable further support for the school as such, so that their future as a school becomes more stable, as well as contributing to the wider community.

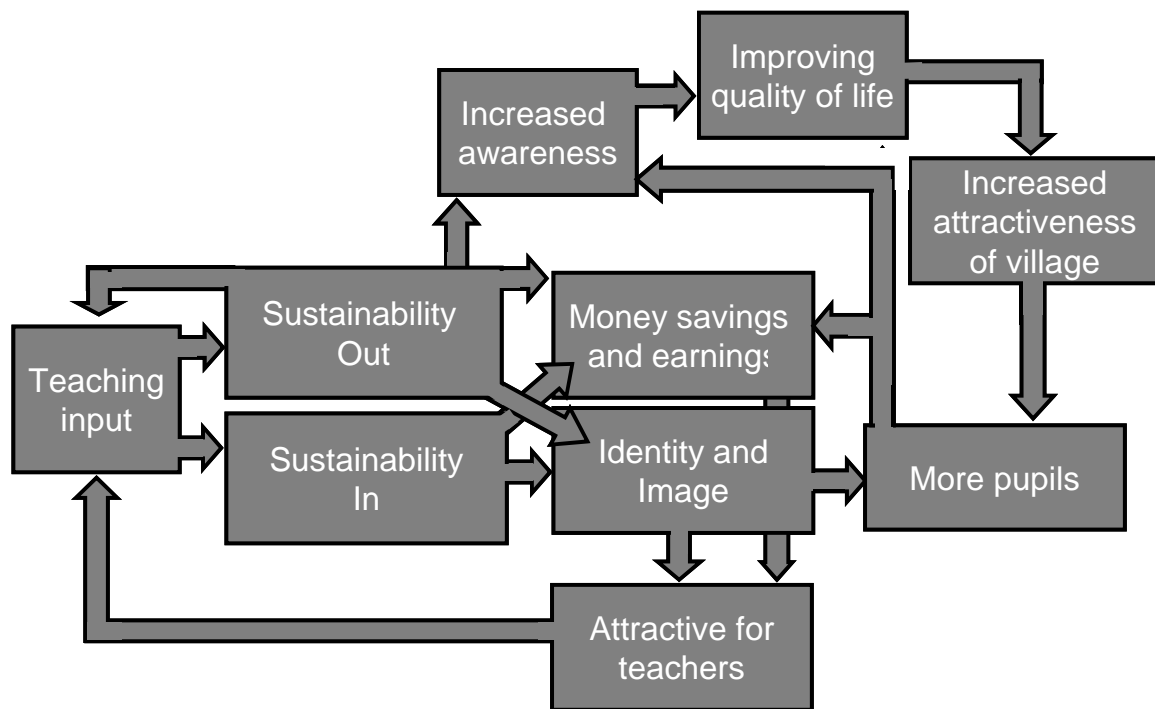


Figure 11 The chain of effects when implementing EFS in the school

Starting of with teaching input, the process of integrating sustainable school practices and teaching is initiated. The pupils and teachers in collaboration are to have roles of ambassadors for change in the local community. Through their efforts, both practically in the local society as well as indirectly through spreading their awareness to others, such as pupils to their parents, the awareness of the local community will hopefully increase. Also external activities can through the involvement of external actors feed back into teaching input, as knowledge and experiences of those actors are shared with the staff and pupils.

As the awareness of the surrounding stakeholders rises, consequently the value of a profile as a “sustainable school” would be greater. One goal of the municipality as a whole is to attract more people to the village, and a more attractive school could help both attract young families, and qualified teachers.

As is shown in Figure 11, the activities related to Education for Sustainability are divided into two main categories, sustainability *in*, and sustainability *out*. These are further explained below, but first it needs to be clarified that the *sustainability in* and *sustainability out* is not to be confused with the aspects of the developed framework. *Sustainability in* simply focuses on the internal activities of the school and the *sustainability out* on the outreach in the community.

### 6.2.1 Sustainability in

“Practice what you teach”, is a common expression, which also very well describes the importance of internal practices considering sustainability issues. As was shown in the good practice interviews, pupils are e.g. encouraged to turn off lights and to think of other energy

saving measures. Many of the schools also work with more extensive energy and resource saving projects. The work with the internal processes in Zákolany has already started, in regards to environmental issues; they started some basic source separation. As the school has a relatively large proportion of children with special needs, the integration of those children and the general well being of practitioners and pupils is given a lot of attention. According to Symmons (1996) research has shown that the so called “hidden curriculum”, i.e. the relationships between people and their management of the close environment, is as important as the formal curriculum in the children’s learning processes. It is important to understand the way adults, in this case teachers and staff, act as role models for the children.

An interview in the conducted pre study gave clear indications of the synergies between environmental and social activities. Projects, such as letting children grow vegetables in the school garden and supply it to the school restaurant, not only helped them understand the environmental aspects of cultivation, but also helped overcome language and social barriers of children from different backgrounds (Åkerberg, 29 May 2003). The school’s internal environment is often in focus of projects with schools in the Czech Republic (Kvasničková, 3 July 2003), and also in other similar international education for sustainability/environment programmes. Aspects like hygiene, food quality and the learning environment are a few examples of focus areas (Eco-schools, 2003; Swedish National Agency for Education, 2000).

The internal activities also include the actual introduction of sustainability into the curriculum.

### **6.2.2 Sustainability out**

Outreach, as has been discussed and analysed in the previous chapter, can be a valuable response to the drivers identified to be affecting, both positively and negatively the strategy of the school. “Sustainability out” therefore involves opening up the activities of the schools to the surrounding community, i.e. working more actively outside the school and with external actors. This in order to encourage support for the schools internal activities to increase the value of their profile, but also to act as an agent for general raising of awareness in the local community.

Figure 12 shows the identified gap between stakeholder expectations and the vision of the school. It also proposes a way to encourage the minimisation of that gap. The figure builds on the idea of enforcing drivers, which was discussed in the analysis (5.1.2). It is a question of trying to influence the stakeholders’ expectations, by educating them. This could be achieved both indirectly through the children and directly through external activities. Returning to Figure 11, the benefits of a changed profile can only be achieved if there is an understanding among the stakeholders, such as parents, potential teachers and authorities, of the content and potential of such a profile. The aim is therefore, as shown in Figure 12, that the profile will increase the amount of stakeholders, and also heighten the importance of the values that support the process, in the local community.

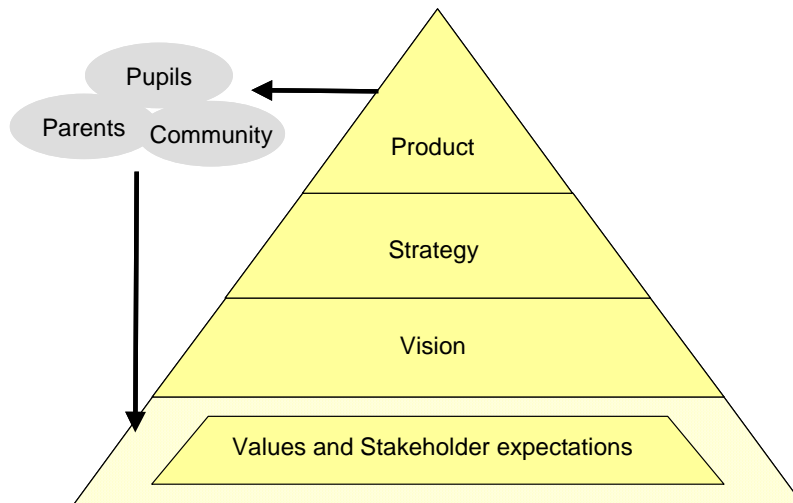


Figure 12 The strategic pyramid of stakeholders' values in relation to the corporate vision and end product/s

The values of society, if considering the international and increasing policy emphasis on EFS, gives the school a certain support. But in general their product, i.e. the educational output, could also further encourage those values. The product thereby consists of both the education provided for the pupils and an image. The goal is to create a further support for their vision, rather than wait for society – especially the local community - to develop its support for the schools ideas at their own initiative. Instead the school should try to initiate it earlier. It is important to emphasise that it should be achieved through dialogue, and that the school should be prepared to adapt somewhat to the ideas of their stakeholders.

### 6.3 Proposed framework

Returning back to the developed framework, which was introduced in Section 3.1, the framework proposed for the categorisation of the external actors is now to be further explained. With the help of the framework the external resources can be categorised in relation to the above discussed internal and external aspects of sustainability in education, as well as in relation to financial and material support.

#### ▪ Inwards educational perspective

A part of changing the school towards more sustainable practices and teaching methods, may involve changes of practices and the content of the school's curriculum. The inward educational perspective therefore includes any input to such developments from the actors in the school's environment. It could be anything from individual actors, such as a parent or a local entrepreneur, to more formal networks with schools, or other types of organisations. They could contribute with inspiration and experiences, as well as actively providing input by teaching.

- **Outwards educational perspective**

As a part of the long-term strategy, and in accordance with the principles of Education for Sustainability, the focus of school activities should be on the community and its development issues. They could as an example work in projects with the local community, and also be a source of knowledge for other schools. In such co-operation there could be potential for synergy, i.e. that pupils, schoolteachers and staff, and the external part all benefit in terms of the learning process.

- **Inwards physical and financial perspective**

As was discussed initially, a major struggle of schools in the process of implementing sustainability issue, apart from time pressure, is their often poor financial situation and the reliance on the efforts of a few dedicated people. This perspective involves the possibilities of attracting financial support from national and international grants, individual donors etc. It also includes the pure physical help in relation to the school facilities, such as community members help with school gardens, maintenance of buildings and so on.

*Box 1-3 Description of the proposed framework*

## **6.4 Test of framework**

The three strategies, with the application of the framework are presented here. It will work as an example how the framework can be used in categorisation of stakeholders and in the choice of the main strategy.

### **6.4.1 The community strategy**

In this scenario the priority would be the connection between the school and the village community. The connection could be based on the cultural and historical heritage of the region. As the school is next year celebrating its 120 years of existence, the launch of the new strategy, and the community activities, could be planned to coincide with that occasion. This celebration could then be made to coincide with the 1100 years celebration of Budeč.



<b>Inward education perspective:</b>	Learning through projects with outside actors.
<b>Outward education perspective:</b>	The usage of the facilities could be made with the requirement that it should not only be of economic, but also of environmental and/or social value to the community as a whole.
<b>Funding/physical perspective:</b>	Income could be generated through the use of facilities. As an example the loft could be used for exhibitions.

Increasing support from the local government in relation to their ideas is something that could be of great value. The local government has shown clear signs of supporting projects related to the celebration of the historical heritage.

The regional government supports projects related to cultural and historical heritage. This implies that the school could receive funding through such grants. The actual celebration could also itself involve money-raising activities. The school could as an example look into co-operation with tourist agencies and/or with museums in the region, as this sight is considered important and already attracts tourism. On the other hand the funding is not something that can be guaranteed in this case. Consequently there is a certain risk that it may lead to extra costs.

The ideas of more flexible teaching methods, and working with longer projects, fit very well with the idea of a project relating to the celebration of Budeč and the school itself. As for the parents, that stakeholder group has not shown any specific support for these ideas. Though they have mentioned project-based teaching as one of their priorities in choosing schools.

From the perspective of the community as such, the people could benefit from a social meeting point, and working on something in common which contributes to the community identity.

#### **6.4.2 The individual value strategy**

In this scenario the strategy clearly departs from the needs of the individual students, though keeping also strong connection to other community members in that process. From an educational perspective this scenario includes increased focus on alternative, qualitative teaching methods.

In concrete terms it would be to focus on the reopening of the kindergarten, and in a longer perspective to extend the education to providing all nine years of primary school if the number of pupils was to increase. An individual work plan, with community members as mentors and teachers would be the central idea.

<b>Inward education perspective:</b>	Involvement of community members, retired people and professionals to have the role as mentors of the pupils.
<b>Outward education perspective:</b>	Involvement in the community through projects, with the aim to improve the community identity.
<b>Funding/physical perspective:</b>	The costs of teaching would be reduced through the input of community members and other external teaching resources.

The parents are increasing their focus on the qualitative aspects of the schooling for their children. There also seems to be good opportunities to involve parents and other community members, as long as their tasks are defined.

More focus on the individual pupils could facilitate the integration of children with special needs, attract more pupils from other villages and keep parents from taking their children to the Prague.

The re-establishment of a kindergarten is considered to be feasible. Firstly, as has been shown both in the good practice interviews and in the findings from Zákolany, a kindergarten increases the chances of making parents let their children stay at the school for the full schooling. Secondly it is believed to facilitate the integration of the children in the school. Finally there is, as shown by interviews with parents and other schools with kindergarten, a need for it as there is great difficulty in finding a place for children in the region.

The use of external resources in teaching, without increasing the costs for the school has also been the case in several of the other schools interviewed in Europe.

The main issue here is the financial situation in relation to the kindergarten. The school needs to find support and funding for the opening of it. There is support for the idea from the local authority, but the actual funding still needs to be looked at further.

### 6.4.3 The village school network scenario

This scenario is concerning the exploration of different opportunities and benefits related to the co-operation with other schools. As it looks from the environmental scan, the co-operation with the village schools within the already established informal network seems feasible, with a initial focus on e.g. Koleč, Otovice and Hřebeč.

In a longer perspective the village school network could take a more and more active role in relation to the surrounding communities and thereby act more as a professional information and education provider. The schools could through the network act basically as type of NGO, with the aim of raising public awareness, but also generate funding through educational programs.

<b>Inward education perspective:</b>	Teachers from the other schools. Co-operation on finding information, teaching material and external lecturers.
<b>Outward education perspective:</b>	Knowledge sharing to other schools. Opportunities for more extensive community projects.
<b>Funding / physical perspective:</b>	Cost cutting through co-operation. Common efforts to locate funding. Easier to receive funding as an association of schools.

In general a network of village schools may decrease the need to focus as much on the actual number of pupils, as resources can be shared between the schools and consequently reduce the costs per pupil. The findings also show that an association of schools is more likely to receive grants for activities and projects.

The identified areas of co-operation benefits are mainly in relation to teacher resources, where also the authority pressure seems to be the most stringent. Furthermore the sharing of facilities, commonly organised community projects and excursions, as well as joint promotion of the village schools to the region are only a few other mentioned opportunities.

A requirement for a network, especially if formally tied, would be a certain level on consensus on the aim with the network. There are some quite large differences in opinions between the schools, such as in their view on teaching methods, which may complicate attempts to network. The network would also created interdependencies, and may change the relative responsibility of the headmistress and practitioners.

### **6.5 The development of strategic planning**

In an additional informal discussion with the headmistress (Bulanová, 25 August 2003) and a meeting with invited stakeholders (including local authority, parents, neighbouring schools, school staff) in connection to a presentation of the good practice examples (4 August 2003), the proposed strategies were discussed. The above test of the framework, and sorting of supporting factors, was used as a starting point.

The meeting once again emphasises the fact that Zákolany are experiencing the same difficulties as the interviewed village schools in Europe, and the other neighbouring village schools. In the meeting the discussion centred mainly around the following three themes:

- local authority support
- strategies for involvement of parents
- networking possibilities

From an economic perspective the networking is perceived as positive. But more closely tied relations were initially believed to be difficult, due to differences in opinion and reluctance to co-operation in general both within schools and between municipalities. As the discussion went along, more and more possibilities though developed.

### **6.5.1 The final decision to formalise the network**

The school, together with the schools of Otvovice, Hrebeč and Koleč, finally took the decision at the meeting to formalise the existing village school network. The decision was to work for the increasing integration of the communities in the schools activities, especially parents and the local authorities. It was suggested that the network should therefore consist of representatives from not only the schools themselves, but also from the local authorities and parents. A meeting was decided for the discussions on a possible common framework for the education in the schools to facilitate the network activities related to teaching. The interesting development here was that the factors that were initially identified as barriers to a co-operation of schools, eventually became the focus of what the network could work with. So rather than being hindered by limited authority and parent support, the network then decided to actively work together on those issues.

## 7. Conclusions

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*This section will provide answers to the research questions, and conclude on the applicability on the developed framework.*

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The concept framework for Education for Sustainability is provided, now it needs to be adapted to the conditions of Zákolany. The school is aiming to continue in their quest for their vision of the school's future, and develop an appropriate curriculum. So what could be understood from this case, and what conclusions can be drawn from this project?

The first research questions were, ***is there/will there be any support from stakeholders in the process of redirecting the school towards EFS and can this then actually help them increase their stability.***

It is argued that the stakeholders, such as parents and also to a certain extent the political authorities, are showing signs of increasing interest in the qualitative aspects of the education. The direct support for, or involvement in, the school activities from stakeholders though is in general low. The trend shows signs a most likely increasing interest of e.g. parents in the school's activities and teaching methods, were also issues like environment/sustainability is awaited to raise in priority.

Furthermore as the awareness of the stakeholders increase, so will the advantage of being a proactive school in relation to EFS. The interview studies from other European schools clearly indicate that there are obvious gains in applying such a profile.

An overall requirement for the redirection of the school, in order for it to contribute to the overall stability, is the communication of the change, and preferable also the involvement of stakeholders in that very process. The communication therefore needs to be done in a more organised manner than has been the case.

The conclusion to the question of the possible support is therefore that it is to a large extent up the school itself if there will be support for their redirection of school practices. This conclusion consequently leads us into the identified importance of interaction with external partners and the two other research questions.

Another part of the research focus, and the central idea of the proposed framework, was ***the benefit to the school of working with external partners and vice versa.***

There is a clear missing link between the policies of the ministries, such as the Ministry of Education, and what actually is being done on a regional and local level. It is obvious that if Zákolany wants to find support for their work with environmental issues, and also for other forms of less traditional teaching, then they could benefit from finding support from elsewhere. The analysis of the first research questions show that as for now the support that could help them redirect is, apart from the internal support, quite limited. Therefore working more actively with external partners would be valuable.

There are obvious advantages related to the increasing networking with other village schools, within the already existing villages school network. From the perspective of survival formalising a network with other village schools seems very feasible. The problems they are

facing are similar, and they all suffer from time and financial possibilities to tackle those problems. From the perspective of Education for Sustainability, the networking partners have started to discuss to incorporate these ideas in the activities of the network and the development of the curriculum. In order for the schools to find synergy between the implementation of EFS and their survival, they should avoid letting their future networking efforts make them loose contact with the local community and its actors. The idea of ensuring local community members, such as representatives from parents and the local authority, is positive in this respect.

The lessons learned from the interview studies, especially in the case of the Swedish village schools, clearly show the benefits of interacting continuously and increasingly with the local community. The schools experience a type of reinforcing effect, as one positive project in the community leads to another, and facilitates further funding. The importance is for the school to try to focus on the long-term opportunities, rather than short-term barriers. Although the initial efforts will require more of the school's already precious time, it will in return result in future time- and financial savings.

There are also identified opportunities with further interaction with individual members of the community, such as with parents, entrepreneurs and other individuals. When respondents in the village were asked of their opinion when it came to actually helping the school either by teaching and/or helping out with more technical things the response were mostly the same. They responded "*I'll be happy to help, if the school tells me what I could help them with*". It is obvious that the school needs to pass the perceived line between them and the surrounding community, and vice versa. This does require more direct communication from the school, so that there is a clear among the community members of the specific needs of the school.

Furthermore, as the role is changing, the schools facilities are not fully used and could be opened up to some use for the local community. A community interaction is believed to be of double benefit. The school would both receive help in their work, such as with environmental issues, and at the same time strengthen their position in the village.

In conclusion the principles of Education for Sustainability, the findings of this study, good practice and theory, all implies that there is clearly a benefit in involving external actors in the school's work.

***The proposed framework*** included the above-discussed perspective of local community interaction, as it included both educational input and output. The framework was proven useful in an initial categorisation of the stakeholders in relation to the vision of implementing EFS and concurrently trying to secure financial stability. In the case of Zákolany the framework was believed very useful in the sorting of all the different ideas relating to the vision. As the ideas differed in content, and were relatively many, the framework enabled a prioritisation with the help of the findings of the review of the organisational conditions.

In the future the framework could be developed further to include more dimensions of the stakeholder relations, as well as being combined with some type of system for evaluation of the result, e.g. measurements of success by the use of indicators.

***The core project*** can be believed to have reached its first level of success as the schools participating in the last meeting took the decision to formalise the network. The fact that the schools were open to the idea of having the interaction with the local communities and

sustainability issues as a part of their profile, confirms the belief in a potential in such a strategic combination.

***Finally***, as we do not know, except from a more rhetorical perspective, what sustainable development is, the concept of Education for Sustainability remains somewhat blurry. But the main point here is that this does not imply inaction, rather action with a shared learning experience. The further the study has gone, the more potential in the local community and with partnering schools, seems to unravel. As was pointed out several times in interviews, and also has been an observation of me as researcher, is the fact that the school has been relatively closed in relation to the community. In the quest for defining and developing a path toward the local sustainability, the community and the schools could benefit from embarking on such an experience together.

## 8. Recommendations for follow-up

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*The following section is an analysis of the participative research, i.e. a brief discussion of the lessons learned from this process. But mainly it is a recommendation for the school on how to continue their work, and make it a natural part of their strategy and learning process.*

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### 8.1 Reflections on action research in the school

#### 8.1.1 From information to knowledge

It is of important to clarify that the basis of Education for Sustainability is the difference between enabling pupils to develop not only knowledge, but also a deeper understanding and to reflect over what they have learnt. This study as well as the pre-study shows that this is one of the main problems with the traditional Czech Educational system, and the related policies of today.

A change in the role of the schools, and thereby its practitioners is believed to be of benefit. Previously the role of teachers has often been to deal with the dissemination of information, by applying a top down perspective towards the organisation's stakeholders, i.e. the pupils. Studies in industry shows that this view on knowledge creation and management can be problematic, as it is believed to be the *understanding* of a situation that constitutes the knowledge (Sandberg & Targama, 1998; Jürgensen & Mukhopadhyay 2002). The action research as a tool is trying to grasp this issue, and enable a continuing, and most importantly *shared*, knowledge development in an organisation.

#### 8.1.2 Potential in future action research

This thesis work cannot be considered a full action research project. It could be considered a small first loop in the action research spiral. The continuing steps will have to be taken by the organisation itself. The first loop included the proposal of strategic priorities, which are believed to benefit the two defined needs of the school, i.e. to try to ensure its continuous survival, and its wish to have Education for Sustainability as an integrated part of their offered education.

The action research showed that there was little knowledge on the benefit, or even the necessity, to take into account the external environment of the school, and especially the stakeholders' expectations. The continuous action research could become a part of the school's strategy. With the Education for Sustainability, it would be a natural process. The cyclical process (see 2.2.1) will enable further knowledge creation. Later cycles consist of refining methods, in the light of what has been learnt in the previous cycles.

The main point is that the teachers learn more about what the local sustainability could consist of, at the same time as the pupils. Rather than sit and wait for policy change, it is up to the schools to create and learn from the change.

This type of learning in organisations has been previously researched on. The double loop learning is such an example. As shown in Figure 13, as with the models of Action Research, it explores the concept of cyclical learning.



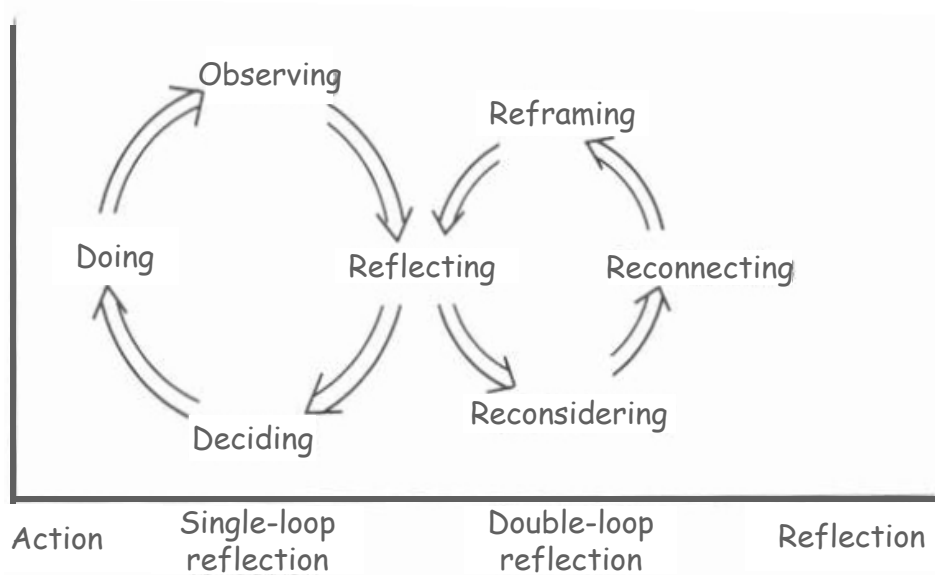


Figure 13 Double loop learning (Senge, 2000)

According to Argyris (1999, and in Senge 2000) many organisations apply only the single loop learning process. This means that the organisation corrects their mistakes in their actions, but without reflecting upon the governing values that are the actual basis of those actions. The double loop learning, which is according to Argyris preferable, not only involves the correction of errors, but also reflection of, and possibly modification, of the underlying norms and objectives of the organisation.

As has been discussed earlier certain core values and the core purposes of an organisation are considered important (Collins & Porras, 1998), but on the other hand the theory of double loop learning indicates a certain danger in blindly continuing on an organisation's strategic path, without reflecting on those guiding values. The new potential role of schools will most probably lead to a certain change in what is believed to be the schools core purpose.

A part of the learning process in the double loop, at the stage of reconnecting, can involve the intake of experiences of other cases of good practice (Senge, 2000). This study is such an example, and it also further supports the school's idea of involving external partners and networks in their change process.

As was stated in the introduction, reflection is considered a core aspect of Education for Sustainability, and is something that could benefit both the school itself and the community.

## 8.2 Further recommendations

*"Non scolae sed vitae discimus"*<sup>14</sup>, can nicely sum up the general recommendation discussed above and can be seen as a suggestion to schools to not only think of this in relation to what the children learn, but also on how they themselves could continue to learn. As was stated by one of the interviewed headmistresses, the school should not see itself as an isolated island, but rather as an active member of the local community.

<sup>14</sup> Latin proverb meaning, "We do not learn for school, but for life". Believed to originate from Seneca Philosopus, who was a teacher of Nero in Rome.

Hereafter some more specific recommendations for the school in Zákolany are listed, of which some are quite context specific, while others certainly are also of general value for village schools working with EFS.

1. The main point, which also has started to be implemented through core project, is the **networking**. There are many reasons why this networking can be recommended. The encouragement and inspiration that it could give the school is an important aspect as well as the potential resource savings.
2. The network must not though take away the schools attention from their close **local community**, as this may then contradict the ideas of EFS. I therefore recommend the school to continue to stress the importance to incorporate the local authorities and the parents in the networking activities.
3. The school should also, to avoid the opposite (i.e. not to become too narrow minded), look outside the region for support, sources of knowledge and inspiration. Several of the interviewed schools in Sweden and Denmark showed a clear interest in creating **international contacts** with Zákolany. Also through organisations like UNESCO, Eco-schools and the interviewed NGO's could the school itself, and/or the village school network find potential partners and projects.
4. As has been shown repeatedly, there is important potential in working closely with the **local authorities**. It may require some work, but with pay off in terms of more stability and a better link to other levels of authority. Although the support from the local authority show signs of continuing, they still have the legal right to close down the school.
5. Overall a **communication plan** should be established at the school. As has been pointed out, a closer follow up on stakeholders and continuous communication can be of large benefit for the school, as well as for the stakeholders themselves.
6. Finally it is important to also see the opportunities in **involving all staff** at the school. By getting them involved, it not only could provide new insights to what could be achieved, but as they are a part of a relatively small community, it provides more links to the people in the community.

## 9. Further research

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*This section is aiming at providing suggestions on further research, based on the limitations of this study as well as ideas of related issues worth investigating further.*

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First of all, this study has been an initiation of an action research project, which is far from completed. It would be of benefit for the school as well as this study in terms of added research value, to conduct a follow up of the started process.

Secondly, something that has caught my personal interest is the effect, in general, of the communist era on the possibilities of involving communities in common action. There are clearly barriers in the Czech Republic in relation to authorities and the community. Many of these barriers seem to be explained by the history of communistic rule of the country until 1989. The belief in joined local community efforts, so often promoted in relation to education and development for sustainability, can be considered more difficult in the Czech Republic. Drakulič (1996), a writer who has experienced and explored the transition from communism to democracy in Eastern Europe, writes that the concept of “we” and “us” have come to have a negative meaning to her, as a result of the communist rule.

A suggested focus question could be:

*The tendencies towards individualism and the negative connotation of community, how does that effect the environment and the quest for sustainable practices in local communities?*

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## ***Meetings and discussions***

Workshop (2003, June 27) Participants: Bulanová, Dása; Filipiová, Romana; Kašpárková, Jitka; Urbanova, Pavlína; Dobešová, Lucie; Dobeš, Vladimír.

Presentation and discussion (2003, September 4) Participants: Bulanová, Dása; Filipiová, Romana; Kašpárková, Jitka; Urbanova, Pavlína; Dobešová, Lucie; Dobeš, Vladimír; Kohoutová, Hana; Komarková, Mrs.

## **Abbreviations**

CZ The Czech Republic

CZK Korun Českých (100 CZK = 2.90 EUR)

EE Environmental Education

EFS Education for Sustainability

EU The European Union

SPEVVO Státní program environmentálního vzdělávání, výchovy  
a osvěty České republiky

Czech State Program for Environmental Awareness, Education and Training

UN United Nations

UNEP United Nations Environmental Program

UNESCO United Nations Educational Scientific and Cultural Organisation

## Appendix 1

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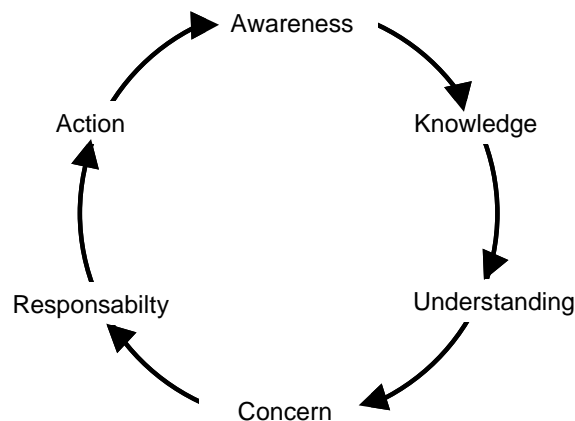
### *What is Education for Sustainability?*

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What actually Education for Sustainability consists of is not the main focus of this thesis. On the other hand it may be of interest for the reader to get a brief review of how Education for Sustainability has been addressed and discussed in previous research.

Like the concept of sustainability, the concept of Education for Sustainability in itself is widely disputed and discussed. Education for Sustainability, Education for Sustainable development and Education for a Sustainable Future, are often considered a development of concepts like Environmental Education, Education for the Environment and Ecologisation of Education. But the concepts are not as simple to separate.

What is often considered important from a learning perspective is the differentiation of education *about*, *in* and *for* Environment/Sustainability. Education *about* environment is along the more traditional lines of education and of more scientific character. Education *in* the environment is more activity based, such as outdoor teaching (Tilbury, 1995). But the connection between the educational systems and the awareness of society in general, more and more emphasised on the international arena, gives the implications that the education should take on a different role. As the UN-UNESCO conferences listed in the introduction suggests, education is being given a broader role as an agent of actual change in behaviour, and not only providing the information about the concepts of environment and sustainability. It should thereby trigger a discussion on what the concepts consist of, and what forms such development could take, and finally start taking action. This is what can be referred to as education *for* environment/sustainability. Tilbury suggests (1995) a threefold approach, i.e. including *about*, *in* and *for*, showed in the figure below.



(Tilbury, 1995. p. 208).

There has also been criticism towards the concepts like Education *for* Environment/Sustainability. According to Jickling and Spark (1998) there is a risk that slogans may lead away our focus from the actual content of such concepts. They also argue that the notion of educating *for* comes from “the language of activists, not educators” (p.315). Jickling (1992) promotes an education free of deterministic values and that as even sustainability in itself is being criticised he wants his “children to participate intelligently in that debate” (p.8). McKeown and Hopkins (2003) on the other hand argue that it is fruitless

to discuss the concepts in such detail as these concepts are depending on language and cultural context. Although they are not the same they should be considered complementary. Furthermore it is argued that as democracy and justice is widely promoted to our children, although these concepts also are very difficult to define, why shouldn't sustainability also be allowed to be (McKeown and Hopkins, 2003).

What is important is that Education for Sustainability is trying to acknowledge the necessary connection between the social, economic and environmental aspects of development, and the fact that they are inevitably interwoven. This implies a more holistic approach, both in terms of specific subject issues and the learning processes. This includes so called cross curricular learning, i.e. that the aspects of sustainability are included preferably in all subjects and that subjects are connected with each other, thus facilitating for the pupils to learn from a broader perspective (Tilbury, 1995; Huckle, 2003). Also the cross-curricular aspects have been criticised as not operational as the teachers, especially in secondary and higher education, have been educated and trained in their specific subjects. To initially incorporate the issue of sustainability within each subject is therefore recommended (Stables and Scott, 2003).

It is clear that even a brief literature review shows that Education for Sustainability is a widely discussed concept. The discussions are of what it means, how it should be implemented and what its benefits and limitations consist of. In this thesis such discussions will not be continued. This research departs from the viewpoint that all this can be argued about and discussed, but in the meantime there are problems out there to tackle. The discussion should not imply that nothing concrete should be done. Schools, such as Zákolany still have the opportunity to explore what could be done in their local community to make it more sustainable and what their role as a school could be in that process.

## Appendix 2

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*Summary of pre study, as a part of a previous paper within the Masters program*

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### ▪ Research focus

The focus of the study was on the city of Kladno and its bioregion, which includes the municipality of Zákolany.

The main research question was: *To what extent is Education for Sustainability integrated in the schools in Kladno?*

The purpose was to generate a general understanding of the barriers and opportunities for the schools in the region, in their process of integrating environmental and sustainability aspects in their education.

### ▪ Methodology

Interviews were conducted with headmistresses and teachers at four schools at different levels, both public and private. The local department of education, as well as a local NGO were also interviewed for the study.

### ▪ Main findings

Education for Sustainability is not yet implemented in the schools. To a certain extent environmental issues were found to be included, but then mainly in traditional subjects such as biology and chemistry, and only to a very little extent in social sciences.

A barrier for change was the fact that the small changes so far were depending mainly on the dedication of a few people, for who no official support or recognition was given. Also the support from external actors, specifically in the case of the local authorities, was considered weak. In general there were no rewards, neither financial nor simply encouraging, for the people driving this process.

The school of Zákolany was found to be in the forefront among the visited schools. And in their case there was a broader support within the organisation for the changes.

## Appendix 3

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*Description of the workshop with the headmistress and staff of Zákloany, and its results.*

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### Strategic workshop

The strategic workshop was conducted with all teachers and the headmistress of the school, on the last day of the school year. The background to the workshop was partly the fact that an in depth discussion with the practitioners of the school would be useful for the study. But it was also due to a suggestion given to the headmistress of the school to perform a SWOT analysis to guide them in the development of the new curriculum.

The workshop was planned and conducted in the following manner:

1. Together with the moderator of the workshop, and with the input from the previously conducted interviews and the result from the pre study, a list of factors<sup>15</sup> was put together. These factors were then presented and extended at the workshop. The trends related to each factor were discussed.
2. Departing from the result of the trend analysis each practitioner was asked to write down, and thereafter present, his or her vision for the school.
3. With the commonly discussed aspects of the vision in focus, a SWOT analysis was performed collectively.
4. Finally different possible solutions and strategies were discussed briefly.

The output of the three first steps is presented below. The fourth step was a more informal discussion, relating back to the vision. Therefore it will not be presented in detail in this section, but is instead included in the overall analysis in the main document.

### Step 1 – list of factors and trends

<b>FACTOR</b>	<b>TRENDS</b>
Number of pupils	<ul style="list-style-type: none"><li>▪ Increasing number of pupils, but mainly within village.</li><li>▪ Special needs may be increasing</li></ul>
Expectations	<ul style="list-style-type: none"><li>▪ “Old type” inhabitants have little expectations, and little interest</li><li>▪ Newcomers have increasing expectations</li></ul>

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<sup>15</sup> Factors were considered those aspects of the external and internal environment that have an effect on the school.



Teachers	<ul style="list-style-type: none"> <li>▪ Number of teachers increasing due to increasing number of pupils with special needs</li> <li>▪ Qualifications, not much change</li> </ul>
Financing	<ul style="list-style-type: none"> <li>▪ State financing could decrease</li> <li>▪ Local government believed to stay the same</li> <li>▪ No support expected from other organisations</li> <li>▪ Parents have limited resources, maybe some slight increase in support</li> <li>▪ Could increase their own money raising activities</li> </ul>
Building and equipment	<ul style="list-style-type: none"> <li>▪ Continuing to worsen. Not fully believing in promised support by municipality</li> <li>▪ Equipment increasing</li> </ul>
Cost per pupil	<ul style="list-style-type: none"> <li>▪ Increasing</li> </ul>
Openness towards other organisations	<ul style="list-style-type: none"> <li>▪ The input from the school is believed to increase</li> <li>▪ The input from outside does not show an increasing trend</li> </ul>
Resource as know-how	<ul style="list-style-type: none"> <li>▪ Increasing role as a source of know-how for others</li> </ul>
Regulations	<ul style="list-style-type: none"> <li>▪ Less regulations</li> </ul>
Support other sources	<ul style="list-style-type: none"> <li>▪ Increasing from other schools</li> <li>▪ From village?</li> </ul>
Mobility	<ul style="list-style-type: none"> <li>▪ Increasing</li> </ul>

## Step 2 - Vision

### Teacher 1:

- Learn to use the space outdoors for teaching.
- More project based education (blocks rather than set hours).
- Kindergarten – in a more open way, closely connected to the rest of the school.
- Mobility – e.g. transportation organised by the school

### Teacher 2:

- More use of the building, e.g. activities with parents
- Projects following through a whole year
- Art centre
- Improved quality of food
- Kindergarten

### Teacher 3:

- 40-45 students
- More motivated teachers and teaching in projects
- Improved facilities, material, Internet, showers
- Flexible helper in teaching

- More equipment for the free activities
- Improved food provided for children
- The loft to be used as e.g. atelier, apartment
- Teaching outside, “green house”.
- To have time to actually implement these things, not spend too much time on administrative issues.

**Teacher 4:**

- 50 pupils
- Project based learning
- More mixed with older and younger children, depending on subject
- More co-operation / more involved parents
- Kindergarten. Prepare children and promote school
- More teachers, special/flexible teachers available for more schools
- In the longer run offering also year 6-9
- More lectures outdoors
- Multicultural space for the community
- EU-grants and sponsors – school fee?

**Teacher 4:**

- Ensure the safe environment of the school
- International co-operation
- Projects rather than only regular classes
- Individual approach in teaching
- Outdoor teaching

### Step 3 – SWOT analysis

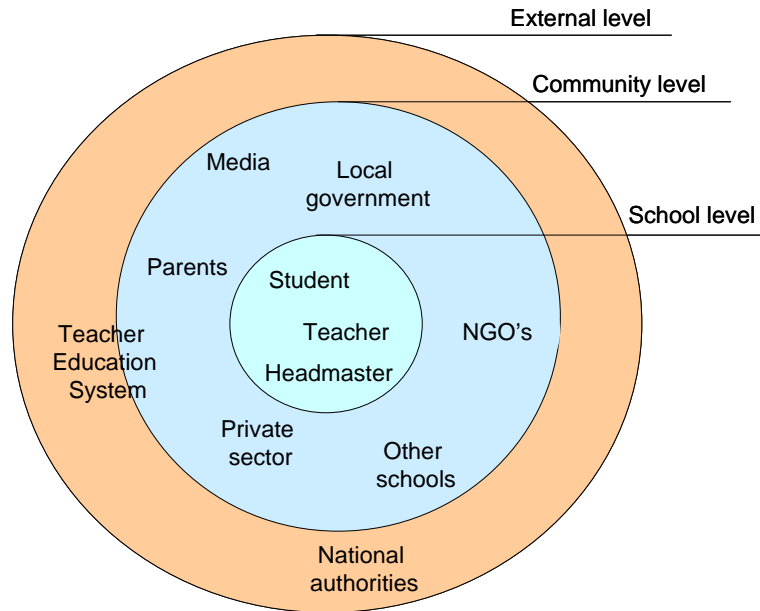
The SWOT analysis is a well-known tool for analysing the strategic prerequisites for an organisation. It is basically a systematic approach to analysing the positive and negative aspects of an organisation’s internal and external factors.

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>▪ The garden space</li> <li>▪ Teachers</li> <li>▪ Space for kindergarten</li> <li>▪ The building</li> <li>▪ Special class</li> <li>▪ Safe environment achieved easily</li> <li>▪ “Family like” environment</li> <li>▪ Equipment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of capacity to find grants/ develop projects</li> <li>▪ The state of the garden</li> <li>▪ The state of the building</li> <li>▪ Communication to stakeholders</li> <li>▪ Capacity/awareness in relation parents</li> <li>▪ Number of pupils</li> <li>▪ No kindergarten</li> <li>▪ Old dining hall, and “old”people</li> <li>▪ Lack of equipment and apartment for teachers.</li> </ul>

<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"><li>▪ Possibility to create curriculum</li><li>▪ External actors, such as pensioners and professionals</li><li>▪ Possibility of assistance from others, such as universities</li><li>▪ Grants</li><li>▪ Co-operation with other schools</li><li>▪ Prosperous community</li><li>▪ Co-operation of village</li><li>▪ Improved transportation</li><li>▪ Parents</li></ul>	<ul style="list-style-type: none"><li>▪ Low salary of teachers</li><li>▪ Administrative burden</li><li>▪ Policy of ministry (regarding financing and closing of small schools)</li><li>▪ Lack of transportation</li><li>▪ Parents</li></ul>

## Appendix 4

*Framework of related actors, developed in the pre-study.*



## Appendix 5

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*A brief description of the respondents to clarify their input and relevance to the study.*

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**Mrs. Bulanová.**

Headmistress of Zákolany School.

**Mrs. Dobešová**

Teacher at Zákolany School. Parent of two children attending the school.

**Mrs. Urbanová**

Teacher at Zákolany School. Parent of one child attending the school, and one child under school age.

**Mrs. Kašpárková**

Teacher at Zákolany School.

**Mrs. Filipiová**

Teacher at Zákolany School.

**Mrs. Kvasničková**

Founder and director of the Club of Environmental Education, an NGO working with education of teachers, and programs and material for integration of environmental education. Previously worked for UNESCO, and now is leading a project for UNESCO, on integration of environmental education in primary schools. Also works in consulting group for the ministry of Environment. Mrs. Kvasničková is since 1996 a member the UNEP Global 500, which is a roll of honour of environmental achievement established in 1987. She received the award for “advancing the cause of environmental protection through education” (UNEP, 1996).

**Mrs. Nováčková**

Background in psychology in relation to education, both as practitioner and researcher. Freelances with teachers' education on methods of interdisciplinary teaching and member of network with other people in this field.

**Mr. Jiří Kulich**

Director of the Centre of Environmental Education, an NGO. Develops and provides environmental education programs for schools and teachers' training centres. Also works in longer national projects related to Environmental Education. Mr Kulich is also a member of the consulting group at the Czech Ministry of Environment.

**Mr. Coufal**

Head of the Department of Education, Youth & Sports at the Regional Government. Responsible for the financial issues in relation to schools, free time activities and other youth related activities. Also works with statistics, and other investment issues.

**Mr. Vladimír Dobeš**

Supervisor for this research project. Board member in municipality of Zákolany. Parent of two children attending the school, and two children yet under school age.

**Mr. Vladimír Černý**

The mayor of the municipality, and therefore head of the municipality board. Has been mayor since 1971, except for a period of 4 years. Attended the school as a child.

**Dr. Karel Tomek**

Director of Department of Basic Education at the Ministry of Education. Previously worked as a director for a primary school, year 1-5.

**Mr. Karel Jech.**

Working at the Ministry of Environment. Working in a group which is responsible for education, in schools as well as in relation to implementation of Local Agenda 21.

**Mrs. Boušková**

Working as assistant to Mr. Jech at the Ministry of Environment. Student in the faculty of Social and Cultural Ecology at the Charles University. Working with the new action plan of SPEVVO.

**Mr Zbyněk Šorm**

Member of the board in the regional government. Responsible for the financing system. Also responsible for the international cooperation, and has general interest in cultural heritage issues.

**Mrs. Kohoutová**

Headmistress of the village school in Otovice and also a member of the board in Otovice municipality. The school is a member of the villages school network.

**Mrs. Vaňková**

Assistant headmistress of the village school in Koleč, as the headmaster is on long term sick leave. The school is a member of the village school network.

**Mrs. Komárková**

Headmistress of village school in Hrebeč. Together with Zákolany they initiated the start of the village school network.

**Parent 1**

Has a child that soon will start attending primary school. She is also a local entrepreneur, owning a horse farm. Has lived in the village for 8 years, with no previous contacts there.

**Parent 2**

Has one child attending the school. She has already had three children before at the school, one grandchild and also attended it herself. Is employed by the school as caretaker, with the help of her husband.

**Parent 3**

Parent of a son of 2 ½ years. Inhabits the village since about 2 years, with no previous relation to the village or the school. Knows the teachers of the school well.

**Parent 4.**

Inhabitant of the village since 1 month. Has a boy in primary school age, attending a school in Prague. The family has no previous contact to the village or the school, and does not yet know the teachers of the school very well.

**Parent 5.**

Has one child starting in the school this year. Husband is originally from the village, and went to the school as a child. The family has had little contact with practitioners at the school since before.

## Appendix 6

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*Presentation of interviews with schools of good practice and with other relevant respondents in relation to the schools.*

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### SWEDEN

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#### ▪ Söderkulla Skola

Location: Malmö  
Type of school: Kindergarten- Year 9  
Number of pupils: 950  
Number of staff: \*

Respondent:

Ronny Åkerberg. Teacher, and responsible at the city district office for environment and schools.

The schools has been rewarded the Green Flag, according to the certification system of Eco schools, since 3 years. The main partner that the school has worked with in this process is the local municipality. Other partners of importance has been the parents, who sponsor certain activities and other schools within the Eco schools network.

#### ▪ Skattungse Skola

Location: Skattungse, municipality of Orsa  
Type of school: Kindergarten – Year 6. Mixed classes  
Number of pupils: 50  
Number of staff: \*

Respondent:

Birgitta Quintino, teacher. Previously worked as headmistress for two other village schools.

The school started to work with Eco-Schools but was then offered to become a pilot school for the Green School Award programme, with the Swedish Agency for Education. They are part of a network in the province of Dalarna, where they receive training and can attend seminars. They have school gardens, and focus in general on outdoor teaching. They have also worked in a project with the municipality of Borlänge, with Local Agenda 21. They experience certain competition from schools in the main town of the municipality.

### ▪ Kyrkbyns skola

Location: Orsa  
Type of school: Kindergarten –Year 6  
Number of pupils: 225  
Number of staff: 25 teaching, 10 others

Respondent:  
Randi Sandemon, teacher.

The school has two main focuses of their work: (i) environmental awareness and (ii) pupils influence. They have been awarded the Green flag of Eco-schools and works with outdoor teaching. Now also focus on what they refer to as “inner environment”, such as democratic process etc. They work in close relation with the municipality.

### ▪ Håstad Skola

Location: Håstad, municipality of Lund  
Type of school: Kindergarten – year 3. Mixed classes  
Number of pupils: 53  
Number of staff: 4 teachers, 5 others, one shared special teacher

Respondent:  
Enikö Bernat, teacher

Håstad School is a village school under constant threat of closure. The school has experienced a large decrease in number of pupils. The school is a part of a project in the region called “the nature school”. The program is run by an NGO, but involves the participating schools in a network, and also the parents are involved in the activities.

### ▪ Hunge Skola

Location: Hunge, municipality of Bräcke  
Type of school: Year 1-5. Mixed classes.  
Number of pupils: 16  
Number of staff: 1 full time teacher, 1 part-time assistant from pre-school

Respondent:  
Gunnel Nilsson, teacher

Hunge skola, in the sparsely populated areas of northern Sweden. It is a very small school, and only employs one teacher. It has recently moved in to the same building as the kindergarten, which is run by a parent co-op. The school is a part of the Z-online network. The school places a large part of their teaching outdoors.



▪ **Trolle Ljungby Skola**

Location: Trolle Ljungby, municipality of Kristianstad  
Type of school: Primary school, Kindergarten – year 6  
Number of pupils: 60  
Number of staff: 4 teachers, and 3 other staff

Respondent:  
Gun Lyckander, teacher

Trolle Ljungby is a small village school with mixed classes. It is located in an area of agriculture in southern Sweden. The closest neighbour to the school is a castle which is the main employer in the village, where several of the parents work. The school is working both with Eco-schools, and with Award for Enviromental school. The school feels under constant threat due to lack of pupils.

▪ **Bäckebo skola**

Location: Bäckebo, municipality of Nybro  
Type of school: Kindergarten – Year 6. Mixed classes  
Number of pupils: 60  
Number of staff: 16 teaching, 6 others

Respondent:  
Marie Carlsson, assistant headmistress

The school is a small village school. The school was a Green School award pilot school, and are now also a pilot school for the so called “schedule free curriculum”. They are working very actively with different partners in their local community and in close relation with the municipality. The school also works in different EU projects related to environmental issues, preferably with international contacts. The school has attracted pupils from neighbouring villages.

▪ **Kumlabyskolan**

Location: Visingsö, municipality of Jönköping.  
Type of school: K-6 – mixed classes  
Number of pupils: 110 (Exc. kindergarten)  
Number of staff: \*

Respondent:  
Karin Göransson, headmistress.

The school is located on an Island, with most parents working on the mainland. Kumlabyskolan has worked with environmental issues for more than 15 years. They are a pilot school in the project of the Green School Award. They were also awarded the environmental award of the municipality.

- **Norrevångsskolan**

Location: Eslöv  
Type of school: Pupils age 5-15  
Number of pupils: \*  
Number of staff: 30 teachers

Respondents: Eva Gantell, teacher. Ingegerd, Böös Ivarsson, teacher.

Participating in the Baltic Sea Project, and exchanging experiences with schools in the Baltic Sea area. Focusing on raising environmental awareness among pupils and their parents. Focusing on respect for nature, and good management of resources.

- **Emanuelskolan, Kometen**

Location: Sjöbo  
Type of school: Primary school, Kindergarten- year 5 (the school also offers year 6)  
Number of pupils: 90 (430 in the school in total)  
Number of staff: 5 teachers, 1 special teacher, 2 kindergarten teachers and 2 recreation instructors.

Respondent: Eva Månsson

Kometen is a part of a school located in the southern parts of Sweden, and got media coverage on the regional news, after which I contacted them for this study. This school is relatively large, but consists of smaller independent units, such as Kometen. Kometen has a mixed class system, although it is not actually necessary in relation to number of pupils and teachers available. Kometen focuses on the individual pupils, and their specific talents and works in an open integrated environment. (The results from the interview is included in the village school section).

- **Z-online, IT project**

Respondent: Gunnar Flood, Kommunförbundet Jämtland

The Z-online network started in 1995/96 as an IT based network, connecting the schools in the province of Jämtland. The province is sparsely populated, and the aim of the project was to better connect the practitioners and pupils of the schools. Today the system has approximately 23.000 users, and now also includes employees of other parts of the public sector, such as municipalities.

- **Byskolor i samverkan [Village Schools in Co-operation], IT project**

Respondent: Lars Eriksson, former project co-ordinator. Teacher in municipality of Vindeln.

The project was financed by EU grants, from the LEADER II budget. The aim of the project was to connect village schools with each other, and also act as a resource in the local communities. The project failed, as there was not enough interest among the local municipalities and the school to enable further funding.

- **Naturrekurscentrum [Nature Resource Centre], NRC, Dalarna**

Respondent: Anders Sundvall

Naturrekurscentrum is an organisation funded by the county council in Dalarna. The organisation works with sustainability issues in relation to businesses and schools. Mr. Sundvall is working with the school network. NRC provides seminars and projects to the member of the network. The seminars are related to different aspects of sustainability, such as environmental issues and children's rights. NRC co-operates with the Swedish National Agency for Education and the Swedish International Development Cooperation Agency.

## DENMARK

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- **Horbelev Skole**

Location: Horbelev (Island of Falster)  
Type of school: K- Year 7  
Number of pupils: 164 (20 with special needs of which 11 integrated)  
Number of staff: 17 teachers, 14 other

Respondent: Bjørn, Birte., headmaster.

Two teachers initiated their environmental work in 1992. The school was a pilot school for Eco-schools in Denmark. They helped develop materials for Eco-schools, and have themselves been awarded the green flag eight times. They also focus a lot of their attention on integrating pupils with special needs.

- **Christiansö Skole**

Location: Christiansö (Island)  
Type of school: K- Year 7  
Number of pupils: 15  
Number of staff: 3 teachers

Respondent: Jørgensen, Ina Tveden. School manager

The school has been awarded the Green Flag by Eco-schools, and does one new project every two years. Co-operation with other island-schools has taken place in their environmental projects. As several of the parents work in the local energy- and water plants the connection between the school and those businesses have become a natural part of their work.

## GERMANY

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### ■ Detmold

Location:	Detmold
Type of school:	Primary school
Number of pupils:	180
Number of staff:	10 teachers, and 6 other staff of which 2 as teaching resources

Respondent: Christ-Dore Richter, headmistress

The school of Detmold is located in an area of social problems and high rate of immigrants. 50% of the pupils attending the school have parents who have less than three years of schooling. In order to address the problems facing the school, much focus has been put into alternative teaching methods, such as so called non-verbal teaching. As an example, a considerable amount of teaching hours are used to invite clowns, jugglers, painters and musicians to work with the children.

The school is also known and awarded for its environmental work. The work is mainly related to waste and resource saving issues, of which 20% of savings is returned to the school.

### ■ Peter-Wust-Schule

Location:	Münster
Type of school:	year 1-4
Number of pupils:	320
Number of staff:	*

Respondent: Helga Kremer-Hilderink, project manager.

Won the price of best school in an Öko-Audit [Eco-Audit] competition in the municipality in 2000. The school was a pilot school in the Öko-Audit programme from year 1997-2000, and all teachers and staff were involved. 50% of the savings achieved were returned to the school. The school has worked with environmental education before the Öko-Audit programme, and launches a new project for the whole school yearly.

### ■ Eichendorffschule

Location:	Münster
Type of school:	Kindergarten – Year 4
Number of pupils:	230
Number of staff:	12 teachers, other staff *

Respondent: Deike Schmidt-Brandt, deputy headmistress

The school is a part of the Öko-Audit project with the municipality. Their work is focused on Agenda 21. Most of the work is focused on resource savings, such as waste, energy and water. The school is given 50% back of the energy savings.

## UNITED KINGDOM

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- Thrussington School

Location: Thrussington  
Type of school: Primary school, from age 5-age 11  
Number of pupils: 50  
Number of staff: 3 teachers, 3 other staff, 1 administrative staff

Respondent: Ann Pearce

Thrussington School has worked very actively with environmental issues. The children are encouraged to save on resource and recycle waste. The schools is also involved in charity work, e.g. through collecting stamps. The school has rewarded the ECO schools flag. Taking the process further, the school has embarked on several interesting projects. They have developed a piece of land, encouraging natural predators rather than pesticides, and also plan on introducing butterflies to the school grounds. The children are also working on a project to encourage the Parish and County council to improve the safety on their way to school.

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\* Information not available

## Appendix 7

*The map of the region, with the villages of Zákolany, Kováry and Trněný Ujezd*

