

Cross-curricular themes in secondary education

Report of a CIDREE collaborative project

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Contents

Contents	1
Acknowledgements	2
Introduction.....	3
Chapter 1 Literature survey.....	4
Chapter 2 Case studies.....	14
Sint-Gertrudisinstituut Landen (Flemish Community of Belgium): social skills	15
Koninklijk Atheneum Middenschool I Genk (Flemish Community of Belgium): learning to learn	19
Cyfarthfa High School, Merthyr Tydfil (Wales): work-related education	23
Pontarddulais Comprehensive School, Swansea (Wales): personal and social education (PSE) ..	30
Writhlington School (England): Orchidaceae, a cross-curricular project spanning science and business study	35
Loreto Grammar School (England): citizenship as a cross-curricular theme.....	38
The Alternative Secondary School for Economics (AKG), Budapest (Hungary): social studies.....	41
Remetekertvárosi Általános Iskola, Budapest (Hungary): environmental education	47
Bonhoeffer College, Kuipersdijk (the Netherlands): Dutch East Indian Company – core skills.....	53
Slash (/) 21, Lichtenvoorde (the Netherlands): using ICT as a cross curricular: web quests in foreign language education.....	56
Chapter 3 Analysis	59
Chapter 4 Concluding observations	67

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Introduction

In 1998, CIDREE published 'Across the Great Divides', the consortium's second project report on cross-curricular themes in secondary education. This report was a more detailed study of the principles and ideas contained in 'Cross-Curricular Themes - A European Dimension', the former project group's first publication. 'Across the Great Divides' is one of the first publications trying to give cross-curricular work a firmer theoretical basis. And it succeeded in doing so, working its way through important aspects like legitimising and nature of cross-curricular themes, describing current practice at that time and providing considerations on implementation and assessment. It still stands as a reference document in many education systems across Europe and beyond.

The current project group, representing ACCAC (Wales), NFER (England), OKI (Hungary), SLO (the Netherlands) and DED (the co-ordinating institution, Flemish Community of Belgium), wanted to build upon 'Across the Great Divides' and to take it further in two different ways. First of all, the intention was to bring together experiences from schools working with cross-curricular themes. This was done by means of case studies. The information for these case studies was gathered according to an agreed framework. They are important primarily because they can be considered examples of good practice. Secondly, the case studies also serve as a small sample basis for analysis in order to have a more detailed view on how schools are dealing with issues such as: implementation and assessment, on the problems experienced in doing so and on the reasons they are working the way they do. The second way in which 'Across the Great Divides' is taken further is an attempt to look for more information. Since cross-curricular work has always been an under-theorised and under-researched issue, the project team wanted to identify the evolution in literature and research since 1998.

The project group's report is presented in four chapters. The first one is the literature survey, drawing mostly on recent sources. This literature survey looks at cross-curricular themes as an educational innovation. Subsequently, it gives an overview of the information available on current practice in schools. This is followed by a closer look at the implementation problems that occur with cross-curricular themes or approaches. Finally, the literature survey briefly touches upon successful implementation strategies regarding cross-curricular themes.

The second chapter contains 10 case studies, 2 for each participating country. All case studies are written according to the same format. This format reflects the project group's experience on working with cross-curricular themes. This vision is among other things inspired by the results of the literature survey. The format starts with information about the school context and a summarising description on the cross-curricular objectives and their implementation. This is followed by a more detailed description of the schools' implementation strategies according to three different aspects: common vision and organisational structures, the school curriculum and monitoring and evaluation. Subsequently, some observations on problems and solutions are given followed by the schools' planned next steps.

The third chapter of the report presents a thematic analysis of the case studies. It brings together information from the case studies from the perspective of development of vision, implementation, features of the school curriculum and monitoring and evaluation.

Finally, the fourth chapter of this report presents some concluding observations. It contains some 'lessons learned' about the problems schools face while dealing with cross-curricular work and the solutions they find in doing so. Secondly, there is a brief reflection on the difficult issue of assessment. Thirdly, a few remarks are made about the discrepancy between the pressure educational policy places on schools with regard to cross-curricular themes and the support schools receive in order to meet these expectations. This report ends with some thoughts from the project group on how the work on cross-curricular themes might be taken further.

Chapter 1 Literature survey

1 Cross-curricular themes and skills as an educational innovation

Traditional school subjects are no longer sufficient to fully elaborate the forms of knowledge that a modern society needs. Rigidly constructed subject-based curricula tend to create a gap between education and the emerging needs of society (CIDREE, 1998).

In England, the emergence of the cross-curricular themes was partly a response to the criticism of the narrowly constructed curriculum of secondary education, as it would not prepare the pupils adequately for the world beyond the school (Whitty *et al.*, 1994). Schools also prepare students to participate in society, which requires a variety of skills, knowledge and attitudes which are not always explicated in the formal curriculum. The OECD therefore recognised the cross-curricular idea as an important innovation (Peschar, 2000). Actually, cross-curricularity is often treated as a vehicle for educational reform (Reid & Scott, 2002).

Cross-curricular themes or approaches today are widely introduced in the educational system of most European countries (CIDREE 1998).

Within the framework of a conference on cross-curricular themes a limited survey was performed in order to have an inventory of the status -compulsory or not- that cross-curricular themes have in 27 European countries or communities that were included in this survey (Maes *et al.*, 2001). A summarising table with the themes and their 'status' is shown in table 1.

<i>Cross-curricular theme</i>	<i>Number of countries (N=27) where this theme is included in the curriculum</i>	<i>Statutory</i>	<i>not statutory</i>
1. Health/ physical/ sport education/ life skills	25	16	9
2. Environmental/ ecological education	21	14	7
3. Citizenship/ human rights/ co-operation/ political/ peace education	19	14	5
4. Social/ communicative skills/ reading/speech	17	13	4
5. Media education/ ICT	15	11	4
6. Learning to learn/ ability to think critically	13	10	3
7. Artistic / cultural education	12	8	4
8. Philosophical education/ ethics/ society	9	6	3
9. Intercultural education	10	8	2
10. Problem solving	8	6	2
11. International education	7	3	4
12. Road safety/ traffic education	6	4	2
13. Preparation for the world of work/ entrepreneurship education	6	4	2
14. Technological education	5	3	2
15. Economic / consumer education	4	2	2
16. Career guidance	2	1	1

Table 1 Summary of occurrence and respective status of cross-curricular themes in 27 European countries/communities included in the survey (Maes *et al.*, 2001).

Acceptance of an innovation by the school, such as the introduction of cross-curricular themes, does not automatically lead to the intended educational change (van den Akker, 1988, 1998). As possible causes for the failure of curriculum reform in the Netherlands, van den Akker (1998) mentions:

- the insufficient empirical support that the reform can be implemented successfully;
- due to the instability of governments, the continuation of the reform can be in danger;
- a lack of efficient and effective co-operation between institutions which are responsible for the improvement of education;
- teachers are no longer involved because changes are often of a much too high level of ambition;
- no formulation of an implementation policy at school level has taken place.

Fullan (Fullan, 1995 cited in Standaert, 2001) summarizes the key-factors that promote the implementation of educational innovation:

- vision-building
- evolutionary planning
- initiative-taking and empowerment, which means that the initiatives come from different sources
- staff-development and resource assistance
- problem-coping, which includes measuring what is important and monitoring the process of change
- reorganising the school as a work place.

Furthermore, it seems important that a detailed formulation, rather than a global description of the core objectives of the innovation, makes it easier for the teachers to understand what is expected from them (Goodlad, 1979).

The CIDREE (1998) report states that using cross-curricular themes or cross-curricular approaches provides helpful constructions to ensure curricular balance, breadth and coherence in terms of new emergent forms of necessary knowledge, which implies that they must be considered a valuable innovation.

2 Current practice within schools

Notwithstanding cross-curricular themes today seem to be widespread in the educational system of most European countries, so far very little attention has been given to a systematic evaluation of the current practice within schools. Most of the research dedicated to this issue is situated in the Anglo-Saxon world and stems from the mid nineties. As not much new research has emerged during the last years, by necessity this literature overview very often refers to these publications.

Garratt and Robinson (1994) report that the five cross-curricular themes identified by the National Curriculum Council are not particularly high on the agendas of many schools. A lack of status and resources with respect to cross-curricular themes was also mentioned by Whitty (1995) and by OFSTED (1998) in a review of secondary schools in England between 1993 and 1997. They suggest that there is a need to raise the profile of the themes if they are fully to meet the curricular aims of 'breadth and balance' and 'preparation for adult life'.

In 1995 the National Foundation for Educational Research (NFER) conducted a survey in order to map current practice in English schools regarding the five¹ cross-curricular themes (Saunders *et al.*, 1995). The main findings regarding practice within schools were, that

- the forms of delivery and assessment varied between themes and also between sectors;

¹ The five themes are: environmental education; health education; citizenship; economic and industrial understanding; careers education and guidance.

-
- secondary schools were more likely to be delivering the themes through a range of subjects and or through PSE; separate timetabling for any of the themes apart from careers education –and to some lesser extent health education- was unusual;
 - the majority of schools did not formally assess work in any of the themes, the exception being careers education; environmental education and citizenship were least likely to be assessed;
 - over half of the schools said there was no accreditation and where there was some form of accreditation, pupils' individual records of achievement played the major role;
 - the role played by external agencies and adults other than teachers is considerable;
 - the ostensible importance of the themes in the curriculum of individual year groups was less than might have been expected from the support for themes in principle, the exception being 'careers education' which was reported to be an area of importance or even a major priority especially for the older year groups;
 - in-service training for teachers has been undertaken on most of the themes;
 - provision of the cross-curricular themes was felt to be broadly successful, though further development work needed to be done;
 - constraints on delivery had been experienced by the majority of secondary schools in most of the cross-curricular areas; pressure on school timetables was the most common cause of problems, but lack of funding and lack of staff experience and/or confidence were contributory factors in many cases.

Although the majority of 156 English and Welsh secondary schools which responded to the questionnaire reported overall support for the themes, they tended not to be given priority in the curriculum of individual year groups, with the exception of 'careers education' which was reported to be an area of importance or even a major priority, especially for the older year groups (Saunders *et al.* 1995).

Common approaches of cross-curricular objectives in England include special events, blocks of activity (e.g. in a modular form), specific thematic areas or approaches to learning or connected to subjects and therefore permeating the formal curriculum (Reid & Scott, 2002).

On the other hand, Whitty *et al.* (1995) found that 71% of the respondents of a postal survey of English, Welsh and Northern Irish secondary schools thought the themes were important. Particularly 'health education' and 'careers education' had the most tangible presence in schools, while 'economic and industrial understanding' appeared to be the most fully permeated² theme in England and Wales.

Whitty *et al.*'s. (1995) study reveals that few schools told their pupils explicitly that they were being taught the themes. Although personal and social education (PSE) could be the context in which schools could provide pupils with the opportunity to pull together all the subject-related knowledge associated with the themes, none of the PSE courses, observed by the researchers, was even attempting to do so.

In 1998 a CIDREE report was published on what is known about cross-curricular themes in practice in a number of European countries in late 1996/early 1997. Information for this study was collected by means of a questionnaire survey of CIDREE member institutions (CIDREE, 1998). A total of 13 cross-curricular themes was mentioned (with some overlap between the different themes). The study concludes that the introduction and maintenance of cross-curricular themes can be successful, if introduced by governments at a steady and measured pace after due consultation, consideration and refinement, and with suitable pedagogical resources. However, cross-curricular themes can also be successfully developed by local initiative, though they are less likely to be spread. Another important conclusion refers to the need of some structured assessment system

² A permeated theme implies that teaching the theme is distributed across a variety of separate subjects.

that helps to maintain the existence of cross-curricular themes. Finally the report emphasised the importance of engaging teachers in developing cross-curricular work.

OFSTED (1998) reports on the implementation of cross-curricular themes in English secondary schools. They conclude that the great majority of schools plan adequately for 'careers education' and 'health and sex education'. On the other hand, there was a less planned approach for 'environmental education', 'citizenship education' and 'economic and industrial understanding'.

In the Netherlands, the Inspectorate reported that the realisation of cross-curricular themes is very weak (Inspectie van het Onderwijs, 2001).

Lord & Harland (2000) conducted a review of the research on pupils' experiences and perspectives of the National Curriculum in England, Wales, Northern Ireland and Scotland. This report also includes studies on 'PSE', 'the environment', 'citizenship' and three studies looking specifically at 'cross-curricular themes' as a whole.

Lord & Harland (2000) report there was a tendency for PSE not to be viewed as a proper subject; it was perceived as low status, superficial and lacking focus.

The other important findings of this report can be summarised as follows:

- understanding of themes was conventional-subject or concrete-example oriented;
- in general, pupils related to the use of 'talk' differently in different contexts, seeing chat as time off-task;
- cross-curricular themes are frequently submerged into a curriculum organised along increasingly academic lines.

Furthermore, the authors found that geography, English and science were the leading carrier subjects for cross-curricular themes as a whole. On the other hand, modern languages, technology and expressive arts were notably absent as carriers of cross-curricular themes.

Citizenship education seems to have been discussed by pupils through PSE tutor sessions, in English and Religious Education (RE).

In an earlier report, Morris & Schagen (1996) reported about geography and science as the dominant delivery mechanisms for environmental education in English schools.

The OFSTED (1998) review of secondary schools in England states that cross-curricular themes have not always been successfully implemented when they were included in other subjects.

In almost all Welsh secondary schools the involvement of pupils in extra-curricular activities is satisfactory, and good or very good in over half (Estyn, 2002).

Since September 2003 there has been a statutory requirement for Welsh schools to teach Personal and Social Education (PSE) to all pupils aged 5-16. The *Personal and Social Education Framework, Key Stages 1-4* published by the Qualifications, Curriculum and Assessment Authority for Wales (ACCAC) in 2002 continues to provide guidance for schools though the document itself is not statutory. A major strength of this framework is the flexibility it outlines for schools to deliver personal and social education through the ethos of the school, whole-school activities and through the subjects of the curriculum (Estyn, 2002).

From the same report it appears that outside PSE lessons, only in a minority of secondary schools is the teaching of the subjects of the curriculum as a whole designed to promote pupils' personal and social development effectively.

Some aspects are taught through subjects: learning aspects through several subjects, physical and sexual aspects through science and physical education and environmental aspects through science and geography. Other aspects, *i.e.* vocational aspects are delivered through a range of activities, ranging from subjects to business-related activities.

Most secondary schools offer separate timetabled lessons in PSE for pupils in either one or both of key stages 3 and 4. Both the content and the arrangement of PSE vary widely between schools, the latter ranging from every week to fortnightly and more complicated arrangements.

Assessment of pupils most frequently is done through observing and discussing their work and through self-assessment. Few schools formally assess their pupils' personal and social development through subjects of the curriculum.

In most secondary schools a single co-ordinator is responsible for overseeing the programme and for monitoring the work of other members of staff.

As part of the curriculum for PSE for all 11-14 year old pupils in Wales, they are introduced to aspects of careers education and guidance. From September 2004, there will be a statutory requirement for schools to provide Work-Related Education (WRE) for all 14-16 year-olds. *The Framework for Work-Related Education* published by ACCAC in 2000 will continue to provide guidance for schools though, like the PSE Framework, it is not a statutory document.

3 Implementation problems with cross-curricular themes or cross-curricular approaches

The CIDREE report obviously shows that dissemination and effective implementation of cross-curricular approaches are among the most difficult of curricular development activities (CIDREE, 1998).

A limited literature review reveals that there are several causes identified which inhibit successful implementation of cross-curricular themes in schools. These can be situated at the micro-, meso- as well as at the macro-level.

The pre-survey report for the European Conference on the implementation of cross-curricular themes reveals that in 15 out of 27 countries/regions involved the problems were situated at the level of the teacher, such as lack of experience or competence. 11 times the school level was reported as the source of implementation problems, such as perceived lack of expertise in coordinating subjects and teachers in making a school policy for cross-curricular themes, while 6 countries refer to the curriculum as the main problem for the implementation (Maes *et al.*, 2001).

Pressure on school timetables and overload of the curriculum seem to be the most common reported causes of problems with the implementation of cross-curricular themes, as for example the study of Saunders *et al.* (1995) and the report of the Flemish Educational Inspectorate (Ministerie van de Vlaamse Gemeenschap, Onderwijsinspectie, 1999) reveal. The same cause was mentioned by 79% out of 173 secondary schools who were involved in a national survey on problems in dealing with citizenship education (Kerr, 1999). Van Looy (2002) reported the same cause as an important obstacle when some Flemish schools in an experimental setting tried to implement the cross-curricular theme 'learning to learn'.

The Dutch Inspectorate of Education (Inspectie van Onderwijs, 2001) reports that teachers have to teach a large number of courses to large groups of classes. Hargreaves (1991) states that the broader the curriculum becomes -and this was one of the purposes behind the introduction of cross-curricular themes- the greater the problem of manageability. Usually, only a very small amount of curriculum time was available for a whole range of cross-curricular material.

The role of the teacher is of great importance for a successful implementation process. However, many teachers report a lack of self-confidence with respect to cross-curricular themes (Saunders *et al.*, 1995) or they feel themselves ill prepared in addressing these themes (Van Looy, 2002; Arnot & Wilkins cited in Kerr, 1999; Kerr, 2000; Inspectie van het Onderwijs, 2001). This inadequacy relates to both the lack of content knowledge and to the inability to employ a range of teaching and learning approaches appropriate to the theme (Kerr, 2000). Teachers may, for example, express some form of anxiety about how to limit the 'talk' in PSE lessons and how much they could allow pupils to say in these lessons (Whitty *e.a.*, 1994).

Therefore, staff training is often reported by secondary schools as the top priority for all the themes (Saunders *et al.*, 1995).

However, even when teachers take part in in-service training relating to aspects of, for example personal, social and health education (PSHE), the impact of this training appears to be limited because teachers have insufficient time to put their training experiences into practice (OFSTED, 2001).

The Inspectorate of the Flemish Community (Ministerie van de Vlaamse Gemeenschap, Onderwijsinspectie, 1999) reports that in-service training is strongly focused on very particular cross-curricular targets and the offer of in-service training programmes for cross-curricular themes is very limited.

A study by Kerr (2000) shows that teachers very often feel they are inadequately prepared to handle cross-curricular themes such as citizenship in the school curriculum. The absence of any specialist training for teachers is considered a potential cause for a failure for citizenship education (Heater, 2001). This is probably partly due to the fact that some of these themes –such as Citizenship- and in contrast to more traditional subjects, lack academic traditions, research and development base. Both schools and teachers expressed their concern about this aspect (Kerr, 2003).

A Hungarian study reports (Falus *et al.* 2003) that in the Hungarian educational system the teacher training strongly influences the status of some cross-curricular themes such as environmental education which is strongly present in subjects such as natural sciences, resulting in the absence of human and social aspects of the environmental issues in the educational system.

The Flemish survey (Maes *et al.*, 2001) shows that 12 European countries/communities out of 27 indicate that their initial teacher training includes cross-curricular themes. However, it is not clear whether they are taught in a systematic way or not, as the approach differs largely from one country to another. 18 countries/communities report there is some form of in-service training with respect to these themes.

Research on the process evaluation of the introduction of cross-curricular themes obviously shows that successful introduction requires the usage of active teaching methods, which according to many teachers, is difficult to realise (Stevens cited in Somers, 2001). This seems to be confirmed by a report of the Welsh Inspectorate who states that in the case where teaching of PSE is less effective, teachers use a narrow range of teaching and learning methods (Estyn, 2002).

Furthermore, it seems that teachers often insist on the dominance of subject principles in structuring pupils' learning. This makes teaching the themes through including them in subjects very difficult. Particularly, the rules of use of 'talk' in different contexts seem to be one of the key problems (Whitty *et al.*, 1994).

Beck & Inman (1993) advocate a form of learning which enables pupils to acquire knowledge through content which is both challenging and relevant and through learning processes which are active and experiential.

Kerr (1999) reported on the low interest of pupils in such issues as citizenship education. However, another study (Lord & Harland, 2000) reports that at year 7 the majority enjoyed their work on the cross-curricular themes and believed they were useful. The authors emphasize that pupils' experience of cross-curricular themes varied according to the values and priorities of individual schools, to the resources available and to the commitment, expertise, values and confidence of individual teachers.

Heater (2001) mentions the general apathy or even antipathy towards political matters among young people as a possible cause of implementation failures for citizenship education.

There is a lot of evidence that co-operation between teachers and the involvement of all teachers of the same school are important conditions for successfully implementing cross-curricular themes (Van Looy, 2002; Estyn, 2002). However, this consultative structure is not always present in secondary schools (Inspectie van Onderwijs, 2001) or there is a lack of communication culture (Csincsak *et al.* 1995 cited in Somers, 2001). Furthermore, members of the school community who are asked to co-ordinate cross-curricular work in schools, often find it difficult to motivate colleagues and don't have the same influence on their colleagues as school directors usually have (Speltinckx 1995 cited in Somers, 2001). The Flemish Educational Inspectorate (Ministerie van de Vlaamse Gemeenschap, Onderwijsinspectie, 1999) therefore strongly recommends the development of the

quality and training with respect to participative decision-making and team-building for school leaders.

Several studies point to the inadequacy or the lack of quality of the teaching and learning resources or curriculum guidance documents (Beck, 1996; Van Looy, 2002; Somers, 2001).

The purpose of curriculum reform is to improve the quality of teaching and learning. This requires a more coherent and more manageable curriculum, where the various parts of the curriculum have a clear and explicit relationship with one another (Hargreaves, 1991). However, Hargreaves (*ibid.*) states that the task to create coherence within the cross-curricular themes is being largely left to the teachers. This can be explained by the fact that some guidance documents provide insufficient advice as to how teachers might make these links. Moreover, guidance documents seem sometimes to intensify the difficulties since there is no coherence of approach across the different themes (Beck, 1995).

Cross-curricular themes often contain examples of contested concepts as Beck (1995) illustrates for citizenship. Consequently as it contains the danger of promoting bias and indoctrinating pupils, teaching cross-curricular themes may render teachers less confident and may lead to less commitment (Kerr, 1999). Furthermore, Kerr (*ibid.*) mentions that 38% out of 173 schools that were involved in a survey of values education reported lack of agreed definition of citizenship education as a main obstacle in dealing with citizenship education.

Heater (2001) even believes that in England the fear that schools may become forums of destabilizing indoctrination is a possible cause of failure for initiatives related to citizenship education.

In some cases (Falus, 2003) lack of financial support has been reported as an obstacle to implement some cross-curricular themes, especially those which require outdoor activities such as environmental education.

Relevance and enjoyment are two critical variables in student attitudes, also with respect to the cross-curricular themes. Students feel that if an aspect of learning is not assessed, it implies that it is of low importance and low relevance to their lives (Walker, 2002). The pre-survey report for European Conference on the implementation of cross-curricular themes reveals that five countries mention the lack of evaluation as an aspect that undermines the status of the themes (Maes, *et al.*, 2001).

In the same report, about 20 out of 27 participating countries mention the presence of some form of assessment of pupils' results regarding one or more cross-curricular themes and 16 countries report a certain form of external evaluation.

Some schools were reported to give higher status to cross-curricular themes by examining them through schemes such as the GCSE (General Certificate of Secondary Education) integrated humanities course (Whitty *et al.*, 1995). The findings of this report clearly point to the importance of having identifiable evaluation systems to provide appropriate recognition and realization rules for work relating to cross-curricular themes. Nevertheless, evaluating attitudes and values and assessing the effect on the pupils' behaviour is more difficult than evaluating gains in their knowledge, understanding and skill development (Estyn, 2002; OFSTED, 1998). The Flemish Educational Inspectorate (Ministerie van de Vlaamse Gemeenschap, Onderwijsinspectie, 1999) also concluded that some aspects of pupil development are strongly under-evaluated at school level, because the evaluation of these aspects requires a method which differs from the traditional evaluation methods.

For instance, particular subthemes where knowledge is involved are easier to assess than others, such as within health education, where the extent to which students' knowledge and understanding of drugs has improved is easier to assess than the effect on their behaviour (OFSTED, 1998).

4 Strategies for successfully implementing cross-curricular themes or cross-curricular approaches

Much research has been devoted to the strategies for implementing educational innovations. Often, the results of this research can be applied to the implementation of cross-curricular approaches as well. In this paper, we restrict ourselves to research particularly conducted to find strategies that refer to cross-curricular themes or approaches.

According to Whitty *et al.* (1995) evaluation of cross-curricular themes should demand that pupils pull together appropriate knowledge from a range of subjects and relate it to everyday life. The criteria for successful learning would then be based on the ability of pupils to integrate knowledge.

Buck & Inman (1993) suggest that the forms of delivery of the cross-curricular themes should meet four important criteria: (1) an objective and open-minded approach of controversial issues with attention for the quality and quantity of evidence; (2) use concepts as the intellectual building blocks and as essential aids to the categorisation, organisation and analysis of knowledge and experiences; (3) use participatory and experiential teaching and learning styles; (4) deal explicitly with questions and issues that enable pupils to explore fundamental aspects of our lives.

In her report on the implementation of cross-curricular themes in the first cycle of secondary education, the Flemish educational inspectorate (Ministerie van de Vlaamse Gemeenschap, Onderwijsinspectie, 1999) reports a strong correlation between successful implementation of cross-curricular themes and the school culture and organisation characterised by the following features: both the vision and goals are well described and all participants are familiar with it; the school aims at both cognitive and personal and social development of their pupils; decision making happens in a participative way; the school has a strong ability of self-assessment and is prepared to innovate (Ministerie van de Vlaamse Gemeenschap, Onderwijsinspectie, 1999).

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Chapter 2 Case studies

- 1 St. Gertrudisinstituut, Landen (Flemish Community of Belgium): social skills
- 2 Koninklijk Atheneum Middenschool I, Genk (Flemish Community of Belgium): learning to learn
- 3 Cyfarthfa High School, Merthyr Tydfil (Wales): work-related education
- 4 Pontarddulais Comprehensive School, Swansea (Wales): personal and social education (PSE)
- 5 Writhlington School (England): Orchidaceae, a cross-curricular project spanning science and business study
- 6 Loreto Grammar School (England): citizenship as a cross-curricular theme
- 7 The Alternative Secondary School for Economics (AKG), Budapest (Hungary): social studies
- 8 Remetekertvárosi Általános Iskola, Budapest (Hungary): environmental education
- 9 Bonhoeffer College, Kuipersdijk (the Netherlands): Dutch East Indian Company – core skills
- 10 Slash (/) 21, Lichtenvoorde (the Netherlands): using ICT as a cross curricular: web quests in foreign language education

Sint-Gertrudisinstituut Landen (Flemish Community of Belgium): social skills

1 School context

The Sint-Gertrudisinstituut is located in Landen and is open to all pupils aged 12-14. The school only offers the first stage of secondary education, which is the first of three stages (second stage is for age range 14-16, third stage for age range 16-18). The school currently has 211 pupils enrolled, of which 112 are girls and 99 are boys.

It has the profile of a real 'middenschool' (middle school) which, like similar schools in Flanders, works according to some clear pedagogical principles. In short, middle schools aim to give a broad education to all pupils (they have a rather heterogeneous pupil population), postponing choices for specialised study courses until the age of 14 and providing strong guidance for their pupils.

2 What are the objectives and how are they implemented ?

The objectives are those of the cross-curricular theme '*social skills*' in the Flemish compulsory core curriculum. For the first stage of secondary education this was introduced in 1997, together with the themes learning to learn, education for citizenship, health education and environmental education. (for more information:

<http://www.ond.vlaanderen.be/dvo/english/corecurriculum/crosscurricular/index.htm>). Schools are obliged to work on these objectives. The schools' efforts are evaluated by the inspectorate during full school inspections.

The school had experience with social skills before it became compulsory through the curriculum. Learning and teaching social skills is important for the school as it presents for them an inherent feature of a good school. The head describes this conviction in the following way: '*if you take the position that you would like to do for every child at school what you would do for your own children, than social skills are automatically dealt with*'.

Next to aiming at a *permeation in all subjects*, the social skills objectives are implemented by means of a separate subject called 'Social activities' in the first year of secondary education. Furthermore, it is an inherent part of school life, of all interaction and activities taking place at school, '*even in the school restaurant*'.

3 Implementation strategies

3.1 Common vision and organisational structures

The *common vision*, shared by most of the teachers, is based on a consensus about the importance of social skills. This consensus originated from the head's strong support for social skills, the school's previous experience and the compulsory core curriculum. Furthermore, the school had two inspectorate audits during the last five years, among other things focussing on the implementation of the compulsory core curriculum. These inspections obliged the school to set up meetings, structures and to make their social skills approach more systematic and wide-spread among staff than it was before.

The small school scale and the informal atmosphere favour the integration of social skills. The school attaches great importance to social skills at the level of the class group. Pupils cannot function well in class groups which are not functioning well. In this respect the role of the form teacher is essential in the school's vision. Furthermore, the teachers' function as role models for pupils is considered very important. All staff members should constantly be aware, should have a basic attitude in their approach, in their interactions, which reflects the importance of social skills at school.

In this way, attention on social skills determines all activities, interactions and relationships at school.

The school clearly thinks social skills are only valuable when put into daily practice and does not believe in theoretical concepts, in artificial integration in lessons and in paperwork. Nevertheless, the school used the compulsory core curriculum objectives, including social skills, to draw up a school development plan. The school was obliged to write this plan but saw it as a good opportunity to extend the existing guidelines for new teachers to a real school development plan. The head considered it a good exercise to actually write down what the school's vision on a number of issues was. The compulsory core curriculum objectives were a good tool to make up an inventory of what objectives are dealt with already and what objectives are left out. This way, the fields in which actions needed to be taken became visible and the school's vision became clear and better communicated. The school is aware that not everything is clearly on paper in an integrated way as yet. Regardless of the school development plan, bits and pieces can only be traced in reports of working group or teacher council meetings.

Out of the different compulsory cross-curricular themes, the school considers social skills and learning to learn the most easy to implement (the others are: education for citizenship, environmental education and health education). The results of the school audits and of the inventory made by the school itself convinced the teachers they were already good at social skills provision and that it was not very difficult to make some changes toward the compulsory objectives. The school considers the implementation of social skills more difficult to accomplish in some subjects than in others.

In terms of *school organisation*, the school uses its existing working structures to plan and prepare the implementation of the curriculum. The school has a teachers' council with elected teacher representatives who work with the head over a two year period. There is also a group working on pedagogical items. It is this group which dealt with the compulsory cross-curricular objectives. Although the functioning of this group is not as it should be according to the head (not enough continuity), it had an important role in this area. Because of prior experience in the school, this working group didn't have much work on the social skills area and didn't consider it necessary to write everything down on paper.

The other teachers are involved by means of the working group's and teacher council's meeting reports. These are actively discussed and remarks and suggestions are taken on board as much as possible. In general, teachers show a strong motivation when it comes to social skills.

The head considers it a continuing challenge to keep all staff members involved, to have them work according to the same vision and principles. Extra effort is being made for new teachers. They are more closely followed and introduced to the school's vision and activities, by the head and by more experienced teachers.

The *head* tries to *stimulate and support* the social skills implementation, but doesn't attribute much extra time, money or material to it. Teachers, however, feel supported by the head. They can, for instance, follow in-service training when they request this and the head provides them with all necessary information on curriculum and other pedagogical issues.

A number of teachers participate in *external in-service training* in order to enhance their competence. They also share this experience with colleagues as a way of informal internal training. The school refers to training on the concept which is behind the compulsory social skills objectives. The school would also like to involve more external expertise. There is an external expert who gives a lesson on 'relationships' in the second year but the school would like more of this external help.

Another important way for the school to enhance its professionalism is its contact with schools in a network for autonomous 'middle schools'. These are schools with an autonomous first stage of secondary education more or less sharing a common view on the objectives and organisation of this first stage. Sharing expertise with other schools in this network has been of great benefit.

3.2 School curriculum

The *school development plan*, being the basis for the school curriculum, contains a number of objectives relating to social skills and explains the school's approach in this area.

In the first year of secondary education, there is a special subject called 'social activities'. This is taught by the form teachers. The subject content is partly based on the 'life keys' approach. This is a course worked out by a private organisation. Teachers of the school attended 'life keys' in-service training and use part of the materials. The teachers with the 'life keys' training co-ordinate their work in this area (although less than a few years ago) and try to inform teachers who did not follow this programme.

There is no separate subject in the second year but form teachers pay special attention to social skills within their respective subjects. Teachers see subject related objectives as a tool to work on cross-curricular objectives, for instance by means of using interactive and cooperative learning and teaching approaches. The head doesn't think this is the best approach (a separate subject would be the optimum choice) but since a broad consultation process showed it is not possible to leave out (part of) a subject in the second year time table, the teachers' council decided not to opt for a separate subject.

In addition to the subject approach, social skills permeate the school culture. Social skills are dealt with in all activities and interaction. An example of this is the participation of pupils in the school's policy. This starts with the way pupils agree on proposals in the class group, how this is organised in the pupils' council, how it is communicated with teachers and head, how feedback about the decisions is given to the class groups, and so on. In all activities, attention is paid to social skills. Another example is the introduction day at the beginning of the first year's school year. This day is not just about informing pupils about the way the school is working but has an important social dimension in terms of paying attention to interaction with other pupils and with school staff throughout the school year. One of the things discussed during that day are the so called 'life rules' in the introductory brochure for new pupils. These 'life rules' are, to a large extent, focussed on the way interaction with different people in different situations and contexts is intended to be.

3.3 Monitoring and evaluation

The most systematic evaluation was done in order to prepare for the inspectorate's school audit. An inventory was made of all activities at school level and this was compared with the school's vision on social skills (and other topics). The same happened for every subject. This way, the school had a clear view on what was happening and what was not, and could set out targets for the future.

Furthermore, there is no large scale monitoring or evaluation for social skills. Monitoring and evaluation are largely based on small scale self-evaluation. After every activity, teachers and pupils are asked to give their opinion on what was positive, what was negative and how the activity could be improved. The school secretariat makes a synthesis of this information which is then used to prepare future activities.

The school doesn't think it could measure the added value for its pupils. That would technically be too difficult. However, in awarding gradings to the pupils, teachers of physical education take social skills into account for about half of the total pupil assessment.

In terms of pupil satisfaction, pupils are very enthusiastic about the 'social activities' course in the first year.

4 Problems and solutions

One of the problems the school admits for itself is that some aspects of the compulsory curriculum are not adequately dealt with yet. The school plans to work on these gaps.

Although there is a vade mecum (introduction and guidance document) for new teachers, the head feels it takes a lot of time and energy to introduce new teachers to the school's vision and approaches. During the last couple of years, it is clear that teacher training institutes have paid more attention to the cross-curricular themes in the compulsory core curriculum, but the concrete application in each school is different and takes time to get acquainted with. A longer period of on-the-job training for student teachers might be a solution here.

As for the more experienced teachers, the head considers them competent to work on the social skills objectives but would still like more of them to attend in-service training. The teachers do not always consider themselves sufficiently competent.

Another problem is a lack of time. It would be ideal to make a teacher class-free to coordinate work on social skills or cross-curricular themes in general. However, the small scale of the school makes this impossible to accomplish. More time for planning and building strategies and less voluntary work for the teachers would be very welcome.

Another problem is the inflexibility of timetables. The school (and not least the pupils) would like to introduce a weekly course on social activities in the second year as it does in the first but has not succeeded in changing the timetable accordingly. A subject or part of a subject would have to be deleted in that case which seems to be impossible. Subject requirements have to be met at the end of the second year.

Teachers experience the overload of subject curricula as an important complicating factor. This curriculum overload leads to a lack of time left to spend on social skills-related activities.

Teachers complain about paper work as well. Showing to the inspectorate that one is really making effort to implement social skills and other cross-curricular themes requires extra paper work which comes on top of an already heavy work load.

There are some teachers who work for a few hours in the school and the rest of their work is done in the upper secondary level school. The few hours they spend in the middle school are not enough to get fully accustomed with the vision and culture relating to social skills.

When the compulsory core curriculum was introduced, there was some reluctance from teachers who complained that they had to do all this on top of their already heavy work load. But making the inventory and discussing this during meetings and with teachers on an individual basis made it clear that they already were doing a lot of what is in the compulsory cross-curricular themes, certainly as far as social skills are concerned.

5 Next steps

Further planning for the school is to:

- work at continuing an intensive social skills approach;
- improve the social skills approach by working on those core curriculum objectives which are not or not sufficiently dealt with;
- try out more didactic material;
- spread the vision and the school development plan more widely to the staff;
- adapt the school development plan to meet the changes made in policy and practice.

Koninklijk Atheneum Middenschool I Genk (Flemish Community of Belgium): learning to learn

1 School context

The Koninklijk Atheneum Middenschool I is located in Genk and is open to all pupils aged 12-14. The school only offers the first stage of secondary education, which is the first of three stages (second stage is for age range 14-16, third stage for age range 16-18). The school currently has about 300 pupils on roll.

It has the profile of a real 'middenschool' (middle school) which, like similar schools in Flanders, works according to some clear pedagogical principles. In short, middle schools aim to give a broad education to all pupils (they have a rather heterogeneous pupil population), postponing choices for specialised study courses until the age of 14 and providing strong guidance for their pupils.

Website: <http://schoolweb.gemeenschapsonderwijs.be/ms/1/genk/index.htm>

2 What are the objectives and how are they implemented ?

The objectives are those of the cross-curricular theme '*learning to learn*' in the Flemish compulsory core curriculum. For the first stage of secondary education this was introduced in 1997, together with the themes of social skills, education for citizenship, health education and environmental education. (for more information: <http://www.ond.vlaanderen.be/dvo/english/corecurriculum/crosscurricular/index.htm>). Schools are obliged to work on these objectives. The schools' efforts are evaluated by the inspectorate during full school inspections.

The school has a *tradition in learning to learn provision*, originating in its previous educational priority policy and current equal opportunities policy. These policies are funded by the Education Department in terms of extra teaching hours.

Next to a *systematic permeation in all subjects*, the learning to learn objectives are implemented by means of an *extra course hour 'study guidance'* during four months in the first year of secondary education.

3 Implementation strategies

3.1 Common vision and organisational structures

The *common vision*, shared by most of the teachers, is based on a consensus of the importance of learning competencies. This consensus originated from the head's strong support for learning to learn, the school's previous educational priority policy and current equal opportunities policy which oblige the school to work on learning competences. Other elements leading to this consensus are: the compulsory core curriculum, teachers' experience of the necessity of learning to learn for pupils' school career and future life, and prior experience with learning to learn materials.

Through the range of factors mentioned, the school's vision did not occur overnight but grew gradually and became better clarified due to staff meetings where teachers discussed the implementation of the core curriculum.

The school is not in favour of constructing theoretical concepts but translates decisions fairly quickly and directly into concrete actions. As far as 'paper work' is concerned, the only 'tangible' evidence of shared vision on learning to learn policy are meeting reports and the school development plan.

In terms of *school organisation*, there is no separate structure for learning to learn or for other cross-curricular themes. The *pedagogical council* (representation of teachers advising and assisting the head in the school's pedagogical policy), *staff meetings* and *subject working groups* are important. At the initial stage, each subject group had to take stock of what was happening in their own subject in terms of learning to learn. This way, the school had a systematic view of its strengths and weaknesses concerning the implementation of learning to learn objectives. Based on this analysis, measures were taken to make those objectives already in place more systematic. The objectives that were lacking were given a place in activities such as a project week or an integrated working period.

Subject groups have a fair amount of autonomy to decide on their own work. Generally, meetings of subject groups take place outside class hours. Occasionally, teachers are made 'class free' for half a day. Communication within the subject groups is good but the flow of information and the co-operation between the different groups could be improved.

The head also believes in the *informal communication and co-operation* regarding learning to learn. In general, teachers have a strong sense of mutual support, certainly within the subject groups.

Next to these team aspects, the head tries to hold *every single teacher responsible* for his or her contribution to the learning to learn policy. Every teacher has to keep notes of the learning to learn and other cross-curricular objectives they work on in their lessons. This way, the head tries to accomplish an integrated approach. In reality, there are differences in the way teachers commit themselves. The head also tries to encourage teachers to take initiatives themselves.

The *head* tries to *stimulate and support* the learning to learn implementation, in pedagogical, practical and financial terms. Special attention goes to *new teachers*. The head follows them more closely by examining samples of their preparatory work, occasionally visits their lessons and discusses the integration of learning to learn in their learning and teaching approach. New teachers also get informed by those teachers having attended in-service training.

A number of teachers participate in *external in-service training* in order to enhance their competence. They also share this experience with colleagues as a way of informal internal training. The school refers to training provided by private initiative, the pedagogical guidance centres, universities and institutions for higher education.

3.2 School curriculum

The *school development plan*, being the basis for the school curriculum, contains a number of objectives relating to learning to learn and explains the school's approach in these areas.

Furthermore, there is the *extra course hour 'study guidance'* during four months in the first year of secondary education. In these hours, a number of competences are developed: how to plan school work, how to prepare for tests, how to make an assignment, how to fill out the school agenda, how to analyse information according to the LOTUS (learning/finding/key words/deepening/scheme) method, and so on.

In addition, *each subject* has its own learning to learn dimension. Each lesson or each lesson cluster for each subject is supposed to pay attention to the way pupils learn and is supposed to help them acquire learning competences integrated in the subject-related competences. For instance: learning to study geometry in the best way possible. The learning and teaching strategies should be attuned to the learning to learn competences pupils have to acquire. Teachers are generally free to determine their own learning and teaching strategies.

In the school, *remedial teaching* also has a strong learning to learn focus. This is determined separately for every pupil requiring remedial teaching.

Connections between subject related and learning to learn objectives are also made at the 'theoretical level'. Teachers have to make *year plans* in which they take note of the subject and cross-subject objectives to be worked on. The head feels that regular stimulation is needed here in order to avoid teachers simply copying plans from one year to the other. Plans get outdated this way and risk not being attuned to the compulsory core curriculum.

Due to the combination of these different approaches, learning to learn has become an *integral part of the school culture*. Most teachers see learning to learn as an inherent part of good practice. It is a part of the school's identity and profile among external stakeholders such as parents.

3.3 Monitoring and evaluation

The head monitors the learning to learn implementation by checking *the teachers' year plans*. The teachers have to keep note of the objectives they work on. This way, the head has an overview of the activities and knows where actions should be taken.

Furthermore, the head observes his staff and stimulates them to further develop initiatives he considers good, to make them more systematic and to share them with colleagues.

Every year, there is a structured *evaluation meeting* with the staff. This meeting evaluates the current year's activities and subsequently prepares for the next year. Decisions on curriculum changes are mostly made as a result of these meetings. Changes during the year are sometimes taken on the head's initiative.

The *subject groups* also evaluate their contribution to the learning to learn objectives. This is prevalent in their meeting reports but is not done very systematically. The head monitors these subject groups and checks whether the decisions made are implemented.

There is *no systematic pupil evaluation*. Head and staff experience an added value of the learning to learn approach, for instance by improved subject test results, but this is not really assessed. Teachers feel that those pupils receiving extra individual care gain most in terms of their learning competences.

4 Problems and solutions

One of the most disturbing problems the school experiences is a *lack of time*. The school tries to give extra support to the pupils who need it the most but find it hard to allocate time for such individual activities. Furthermore, parents don't always allow pupils to stay after school hours. The head would like to introduce a different structure for the school day; for instance, a structure like in Germany with half a day teaching and half a day for other activities.

A problem teachers deal with is a *lack of infrastructure*. There are not enough class rooms and the rooms are not big enough to work in a differentiated and interactive way.

The school also experiences a *curriculum overload* which exacerbates the time problem. The head tries to solve this by giving the teachers explicit autonomy to allocate time to things other than pure subject content. But teachers experience pressure from another side as well. Subject advisers visiting the school comment on teachers being behind in the year plan. This puts teachers in a difficult position.

The head also feels *not all teachers are equally competent* to work on learning to learn objectives. And some teachers, particularly the older ones, sometimes fail to see the necessity of learning to learn and see themselves purely as a subject teacher. The head tries to convince these teachers as much as possible but the success is variable. After all, learning to learn should not be too dependent on the individual teachers' approach but rather be a systematic achievement. Pupils confirm that most teachers pay attention to learning methods.

Some teachers see the learning to learn approach as an *extra burden* on which they have to dedicate more time and energy. The head tries to stimulate reluctant staff as much as possible by trying to make them acknowledge the added value for pupils.

The school is convinced that learning to learn requires a lot of *paper work* for the sake of the inspectorate. Teachers argue that learning to learn should be an inherent part of their work, a spontaneous attitude which is damaged by having to put everything on paper.

Teacher training, according to the head, insufficiently prepares future teachers to work on learning competences. He considers the teaching methods being taught at teacher training institutes to be very traditional. This is the case in higher education teacher training institutes but even more so at university level. Student teachers here have a very short training which is far too cognitive. In general, the head observes that teacher training is not attuned to innovations in secondary education.

Teachers would like in-service training to be organised outside class hours. Following in-service training during school hours is too disturbing for the pupils.

This school is an autonomous first stage school and the second and third stages are organised in a separate but associated school. The school feels that the energy it invests in learning to learn is to some extent wasted since the second stage doesn't work on this topic with the same intensity. *Continuity* is a problem here. This will probably improve since the compulsory core curriculum is being introduced in the second stage as well.

Equally, the school finds their pupils insufficiently prepared by *primary education* when it comes to learning competences. Things like filling out a school agenda, making a weekly work plan or preparing their schoolbag according to the weekly planning, are inadequately dealt with.

The school experiences significantly more learning problems with non-native pupils. This is mainly due to language barriers.

Some pupils consider the learning to learn lessons in the first year as 'boring'. They say that a lot of what is being taught is only relevant in the future when they have to deal with larger quantities of course material, but not now.

5 Next steps

Further planning for the school is to:

- intensify the learning to learn approach, for instance by making the remedial teaching more coherent in approach and by improving communication between staff;
- organise more consultation at the whole-school level;
- work towards better attuning the learning to learn approach to the compulsory core curriculum;
- engage in more project work;
- work towards a better continuity in the secondary education curriculum by setting up meetings with staff and management of the second stage.

Cyfarthfa High School, Merthyr Tydfil (Wales): work-related education

1 School context

Cyfarthfa High School is open to boys and girls of all abilities aged 11-18. It is a state school maintained by the Local Education Authority. The school is situated in the town of Merthyr Tydfil in the Welsh valleys. Previous heavy industry in the area has now closed down and there is a high level of unemployment in the town. The school is one of five secondary schools in the town and is over-subscribed so that its accommodation and facilities are stretched. There are two school sites, some distance apart, one housing pupils in Years 7 and 8 with the other housing the remaining pupils. Staff teach at both sites and the timetable has to allow for travelling time between these sites. There are currently 1404 pupils on roll.

Website: www.cyfarthfahigh.merthyr.sch.uk

2 What are the objectives and how are they implemented?

The objective is to provide a programme of work-related education (WRE) for pupils aged 14-19 years in line with *The Framework for Work-Related Education* published by ACCAC, the Qualifications, Curriculum and Assessment Authority for Wales, in 2000. A relevant programme for 11-14 year-olds is linked to that for older pupils, as part of the school's curriculum for Personal and Social Education (PSE), which includes aspects of careers education and guidance. PSE became a statutory requirement of the curriculum for all pupils aged from 5 to 16 in September 2003.

From September 2004, there will be a statutory requirement for the provision of work-related education for all 14-16 year-olds in Wales. The ACCAC Framework, though not a statutory document, will provide guidance on this requirement. Since there is no statutory requirement for students to remain in full-time education after the age of 16, there can be no statutory requirement for WRE for 17-19-year olds, though the *Framework* will continue to provide guidance for this phase of education.

Through establishing effective links between education and industry, the school aims to:

- increase students' motivation, confidence, self-esteem and achievements;
- improve students' competence in key skills;
- make students more employable;
- help students plan for more realistic and meaningful careers;
- encourage students' commitment to lifelong learning;
- strengthen and increase employers' support for, confidence in and understanding of education;
- support the nation's future economic competitiveness;
- help to achieve national targets.

The school accomplishes this through: a programme of careers education and guidance timetabled as part of the curriculum; work experience in October for all Year 11 students; enterprise activities and technological challenges held on days when the time-table is suspended; mentoring, mock interviews and visits from local business personnel; visits to business and industrial companies; optional vocational qualifications at GCSE (General Certificate of Secondary Education) -Y11 and AS/A/GNVQ/AVCE³ -Ys12 and13 levels; teacher placements in industry; and close links with

³ AS: the first part of the General Certificate of Education A level course, studied over one year and examined at the end of that year, usually Y12 -equivalent to half an A level. Students can take AS only. They do not have to go on to complete the whole A level course. Most students take 4 or 5 AS levels See also next page

the local offices of two companies, Careers Wales and the Education Business Partnership (EBP), who provide valuable support.

3 Implementation strategies

3.1 Common vision and organisational structures

Common vision

The school's policy statement says:

Cyfarthfa High School has a firm policy for establishing effective links between education and industry in order to develop young people for the world of work and to enrich the community.

Ours is an industrial society and we believe pupils are entitled to knowledge and experience of industry.

This policy permeates the whole curriculum and an audit has shown that it has specific benefits for about half the subjects of the curriculum as well as general benefits for increasing pupils' motivation and self-confidence. Staff across the curriculum are involved in the programme, both as form tutors and year tutors as part of the pastoral curriculum and, in some cases, as subject teachers. The programme is monitored by the Senior Management Team and the Governing Body. The school is in an area of high unemployment in the Welsh valleys where traditional heavy industry has virtually vanished. The need to prepare students to enter the world of work with appropriate skills is accepted by the school, its staff and governors, the pupils and their parents, and brings a real sense of purpose to the work-related education programme.

The organisation of the curriculum includes:

- time-tabled lessons of PSE for all year groups. These include aspects of careers education and guidance:
 - Year 7: learning to assess own strengths and aptitudes, and to make informed choices
 - Year 8: labour market information provided by careers officer
 - Year 9: preparation for making option choices in KS4 (Years 10 and 11)
 - Year 10: individual interviews with careers officer
 - Year 11: preparation for and review of work experience; individual interviews as required
 - Years 12 and 13: careers education and guidance including information about Further and Higher Education
- extraction from subject lessons for Year 10 pupils for mentoring by personnel from the local tax office; activities include mock interviews, preparation of CVs and application forms. This guidance is particularly effective as it comes from someone outside the school, from the business world.
- an annual session of two thirds of a day for Years 7 to 11 led by staff from EBP when the time-table is suspended. This can take the form of challenges or advice/information. This year's programme includes:

at the beginning of their sixth form (Y 12) education and then go on to choose 3 subjects to study in Y13 to complete the full A level course.

A level: General Certificate of Education, Advanced level - The whole 2-year course taken usually in the sixth form comprising AS (see above) and A2, the second year of the course.

GNVQ: General National Vocational Qualification - the vocational equivalent of GCSE. Can be taken at Foundation level (level 1) or Intermediate (level 2), pre or post-16.

AVCE: Advanced Vocational Certificate of Education - the vocational equivalent of A level.

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- Year 7: focus on recycling; team work and problem solving
 - Year 8: a chocolate challenge; problem solving using chocolate wrappers
 - Year 9: spaghetti towers; team work and problem solving
 - Years 10 and 11: visitors from industry talking about the world of work
- development of an alternative curriculum for disaffected pupils in KS4 which includes group mentoring, and time out of school at a local college for a building studies foundation course
 - new subject/vocational courses for qualifications:
 - KS4:
 - ◆ GCSE (General Certificate of Secondary Education) Applied Business Studies
 - ◆ GCSE Catering
 - ◆ GCSE Child Development
 - ◆ Building Studies Foundation Course
 - KS5:
 - ◆ GNVQ (General National Vocational Qualification) Intermediate; Leisure and Tourism
 - ◆ AVCE (Advanced Vocational Certificate of Education) Health and Social Care
 - one week's work experience for pupils in Year 11. 25% of pupils find their own placements, sometimes as far afield as London or parts of Europe, if they have appropriate contacts; other placements are found and vetted by Careers Wales.
 - work experience for some students in Year 12, closely focused on the curriculum, career plans and the requirements of Higher Education

School policy

The cross-curricular themes of work-related education and careers education and guidance are an integral part of the curriculum in this school and in Wales. The school's policy has evolved over many years with the first designated team being set up in 1996 to develop links with industry. All teachers are involved, with two teachers coordinating the programme.

In-service training

Coordinators attend relevant external training, often provided by Careers Wales, and feed back to staff as appropriate.

Training for qualifications is provided by the relevant Awarding Bodies and attended as appropriate by the staff involved in teaching courses.

The school receives valuable support and up-to-date information from EBP, and is frequently used to pilot new initiatives. This has clear benefits for the school and provides training opportunities for individual staff.

Staff have opportunities to undertake work placements to enhance their subject and/or management skills.

3.2 School curriculum

The school curriculum and time table is organised to encompass work-related education as indicated in 3.1 above. This applies to all pupils in most respects.

The current national focus on the development of the key skills of literacy, numeracy, ICT (Information and Communication Technology), working with others, improving own performance and problem-solving helps in making connections between subject-related and cross-subject objectives. There are whole school coordinators for literacy, numeracy and ICT. An audit, undertaken in 2001 to identify the impact of work-related education on the subjects of the curriculum, found that about half the subjects benefit. The school encourages subject teachers to take every opportunity to make appropriate links and to use the skills and experience gained by pupils to support their subjects.

Activities organised include:

- technological challenges which aim to develop team work and problem-solving
- talks by visiting industrialists and members of the careers service to provide pupils with up-to-date information about the current labour market and its requirements;
- visits to local firms;
- work experience placements;
- careers conventions;
- use of the school's careers library from Year 9 onwards;
- individual interviews for all KS4 pupils when a careers action plan is developed;
- mock interviews by business personnel;
- sessions with industrial mentors;
- an Understanding Industry course as part of the induction programme for students entering post-16 education;
- SONY Business Challenge in Year 12;
- a Young Enterprise activity open to students in Year 12 which includes the manufacture and marketing of a chosen item.

The school's culture is based on a determination to equip all its pupils with the skills, expertise and knowledge that will enable them to become good citizens, to be employable and to be committed to lifelong learning. It aims to help pupils to develop academic, communication, personal and practical skills along with the ability to transfer and use them appropriately in their adult life. Work-related education is a crucial element in this process being relevant and motivating.

Learning and teaching strategies include:

- pair and group work in subjects across the curriculum to develop oral, problem-solving and collaborative skills;
- development of questioning skills, e.g. in response to a speaker or a media text;
- a requirement for pupils to make presentations to a range of audiences;
- role play and simulation activities;
- research using ICT and print-based resources, e.g. in the careers library;
- modelling relevant writing skills, e.g. in the production of written reports, instructions, explanations, applications, CVs etc.;
- development of practical skills relevant to a subject/career plan;
- individual and group mentoring;
- development of self-assessment by pupils so that they can identify their own strengths and weaknesses, and ways to improve;
- development of evaluative skills;
- development of personal and social skills, e.g. in PSE and across the curriculum.

3.3 Monitoring and evaluation

Monitoring of work-related education is shared by the two WRE coordinators, the PSE coordinator, the Head of Middle School and the Head of Upper School. As part of the school's pastoral curriculum, the school's pastoral team - which includes those listed above as well as their respective

teams of form tutors - discusses, reviews and amends the WRE curriculum regularly. The school also makes significant use of expertise, resources and advice from Careers Wales and from EBP.

EBP is about to introduce a new Awards Scheme which aims not only to encourage education-business links and to recognise pupils' achievements but also to monitor the progress of the work-related education framework for 14-19 year-olds in Wales. The school plans to take part in this award scheme.

The awards are as follows:

Bronze Silver Gold

Bronze – KS3 (Ages 11-14)

To receive a bronze award, pupils must complete/participate in at least 3 employer-related activities during Years 7 to 9.

Suggested competencies:

- Ability to produce a written report
- Ability to work in a team
- Development of oral presentation skills

Silver – KS4 and 5 (Ages 14-19)

To receive a silver award, all pupils must have completed work experience and two of the following:

- An enterprise activity
- Mentoring support from an employer
- A vocational or pre-vocational course
- Input from an employer to support curriculum work

Suggested competencies:

- Development of oral presentation skills
- Ability to work in a team
- Development of communication skills
- Evidence to show research on a business-related theme

Gold – KS4 and 5 (Ages 14-19)

To receive a gold award, pupils must have completed the above criteria as well as an additional 3 employer-related activities (to be left to the teacher's discretion).

Suggested competencies:

- Evidence of written reports
- Ability to innovate
- Evidence of working in teams
- Development of management skills

Allocation of awards will be left to the discretion of the link teacher.

Monitoring and evaluating the work experience programme takes place through:

- visits and telephone communication by staff during work experience week;
- a debriefing with the careers officer for every pupil involved ;
- a questionnaire to be filled in by all pupils involved;

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- a diary kept by all pupils involved which feeds into GCSE oral assessment and coursework for English;
 - feedback to the coordinator from form tutors;
 - assessment questionnaires completed by employers.

The coordinator for work experience analyses these results, identifies strengths and weaknesses of the scheme and carefully evaluates the whole process.

The headteacher, the deputy headteacher and the governing body of the school carry out overall monitoring and evaluation of all aspects of work-related education annually. The school has recently undergone an inspection by Estyn, Her Majesty's Inspectorate for Education and Training in Wales, when work-related education was judged to be very good. Such inspections occur on a six-year cycle.

The assessment of work-related education presents some problems as described in Chapter 5 of *Across the Great Divides*⁴. In this school, it is mainly through teacher observation of such aspects as behaviour and attitudes, coursework, and the National Record of Achievement (NRoA), still being used in KS4 and KS5. Pupils in Year 8 work on school-based self-evaluation files which will feed into Pupil Progress Files by Year 9. The current Year 7 and Year 9 are the pilot years for the new Pupil Progress Files which will supersede the NRoA in the future. These records/files require the pupil to be an active participant and allow her/him to record their own assessment of their skills and aptitudes.

In individual subjects, the school is also moving towards a focus on self-assessment by pupils, with shared criteria in such subjects as English, Welsh, mathematics and IT which are relevant to the required cross-curricular key skills. The means of accrediting these key skills is being developed in KS3 and KS4. National accreditation for Key Skills is available in the sixth form (Years 12 and 13).

4 Problems and solutions

The ethos of this school is such that staff are fully involved in work-related education through their roles within the pastoral curriculum as form tutors, Heads of Year, PSE, WRE and Work Experience coordinators and senior management. The majority of staff are confident and convinced of the value of this approach and cooperate fully with the delivery, monitoring and evaluation of the programme. It is seen to be of crucial importance in an area of high unemployment, where the local culture often does not encourage acquisition of the necessary skills and where stereotypical attitudes to employment still exist, particularly in relation to gender issues.

The school has good procedures for coordinating cross-curricular work and communication between the pastoral and academic elements of the curriculum is good. Links with Careers Wales and EBP are invaluable as a source of expertise and resources, and the ACCAC document described in 2 above, plus its Supplementary Guidance pack, provide relevant curriculum guidance.

There are, however, some problems. These include:

- the reluctance of some teachers to move away from a subject approach, though this is declining;
- lack of adequate time for planning, discussion and co-ordination; coordinators and other senior staff maintain a considerable teaching commitment so that development work is often done in teachers' own time;
- lack of facilities which inhibits the teaching of a wider range of practical subjects;
- lack of space in this over-subscribed school;

⁴ CONSORTIUM OF INSTITUTIONS FOR DEVELOPMENT AND RESEARCH IN EDUCATION IN EUROPE, *Across the Great Divides. Report of the CIDREE Collaborative Project on Cross-curricular Themes*, Dundee, Secretariat of CIDREE, SCCC, 1998, 68 + 13 pp.

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- problems arising from the fact that the school is on a split site with some distance between each building;
 - pressure on the curriculum;
 - breadth of the curriculum and manageability; currently only a designated group of lower ability pupils has access to the vocational GCSE course;
 - the fact that pupils have to be withdrawn from subject teaching for individual interviews;
 - developing valid and reliable pupil assessment.

5 Next steps

The school aims to:

- maintain and build on current good practice;
- further develop links with local industry;
- continue to provide funding to support pupils undertaking work experience at a distance from Merthyr Tydfil;
- increase relevant curriculum provision/vocational courses, finding ways to resolve funding and time implications as well as providing the necessary expertise;
- work, in conjunction with Careers Wales, to provide a system for accreditation for work experience for part-time work undertaken by students in Years 12 and 13.

The *Framework for Work-Related Education* is available on the ACCAC website:

www.accac.org.uk

Pontarddulais Comprehensive School, Swansea (Wales): personal and social education (PSE)

1 School context

Pontarddulais Comprehensive School is open to boys and girls of all abilities aged 11-16. It is a state school, maintained by the Local Education Authority. The school is situated in a small town on the outskirts of Swansea and caters mainly for pupils who live in the immediate area. It is successful and popular. There are currently 792 pupils on roll.

Web site: www.pontcomp.baglanit.org.uk

2 What are the objectives and how are they implemented?

Through a whole-school approach to Personal and Social Education (PSE), the school's objective is to incorporate a range of experiences to promote the social and personal well-being of pupils and enable them to develop a sense of self-worth and relate effectively to others. The PSE programme aims to equip them to be more informed, confident and skilled in order to take an active and responsible part in society and to enhance learning, motivation, performance and achievement.

The school's programme is in line with the *Personal and Social Education Framework, Key Stages 1-4 in Wales* published by the Qualifications, Curriculum and Assessment Authority for Wales (ACCAC) in 2000. PSE became a statutory requirement of the curriculum for all pupils, 5-16, in Wales from September 2003. The ACCAC *Framework* and the *Personal and Social Education Supplementary Guidance* continues to provide guidance for schools.

The aspects which provide the framework for provision for PSE are:

- | | |
|-------------|-----------------|
| ▪ Social | ▪ Spiritual |
| ▪ Community | ▪ Moral |
| ▪ Physical | ▪ Vocational |
| ▪ Sexual | ▪ Learning |
| ▪ Emotional | ▪ Environmental |

These contexts are sustained throughout the curriculum and are picked up where appropriate for each year group, both through academic subjects and the PSE programme.

3 Implementation strategies

3.1 Common vision and organisational structures

The school's vision, shared by all teachers, is for the total integration of the academic and affective curricula in all aspects of school life. This is reflected in the ethos of the school where support and guidance is of high quality and where each pupil is valued as an individual and helped to realise his/her potential. The organisation and methodologies used throughout the school reflect the individual nature of each pupil's development. Expectations are high, relationships are consistently good and the academic and pastoral structures are interlinked through regular and effective monitoring and assessment.

The organisation of classes is flexible in order to meet the needs of pupils and subjects. Form tutor and PSE groups are of mixed ability and the subjects of the curriculum are taught through a mixture of setting, banding and mixed ability classes. This ensures that all pupils are taught in the type of class best suited to their needs and most appropriate to the demands of the subject.

The policy of integrating the academic and affective curricula means that the factual content of the PSE programme is covered wherever possible through the subjects of the curriculum. For example, the facts about health and sex education are covered within science; issues of bullying and prejudice in English; environmental issues in geography, and citizenship and politics in history. This frees up time in PSE lessons for discussion of the wider spiritual, moral, social and cultural implications of these aspects which are explored through drama and role play, discussion and debate. The emphasis is on active approaches with pupil involvement as the principal requirement.

A significant feature of this school is the importance given to the pupils' views. Pupils make suggestions about future PSE topics through their year and school councils, and also have the opportunity to review and evaluate the existing programme. Teachers listen to pupils' views and amendments are often made to accommodate the pupils' requests. Pupils also play a part in formulating school rules and there have been examples of their good sense in responding to and providing solutions for behavioural issues such as the anti-social behaviour of some pupils on the school buses.

Similarly, the staff as a whole are fully involved in the PSE programme. Every teacher is a member of the pastoral team, the majority as form tutors, and their role has a very high profile. All job descriptions make it very clear that staff have a responsibility for both the academic and personal development of their pupils and all staff are committed to this principle. Additionally, the PSE programme is not imposed from above – by senior management – but all staff play their part in building it up during INSET (in-service training) days when the programme is discussed, evaluated and amended as necessary.

Although form tutors deliver much of the PSE programme, significant use is made of external experts and visiting speakers who bring first hand experience and expertise to the pupils.

The school culture is essentially a learning culture. A strong focus on improving the quality of teaching and learning is a feature of the school's development planning and every opportunity is provided for pupils to become involved in the learning process.

The school's policies on Discipline and Attendance support its work on social and personal development.

INSET is provided for staff in three ways:

- whole-school INSET focusing on teaching and learning strategies and/or specific aspects of the affective curriculum;
- regular area and subject meetings to review and evaluate the programme;
- continuous professional development opportunities for all staff - teachers and support staff.

3.2 School curriculum

The school's timetable is organised over a two-week cycle of 50 one-hour lessons. Curriculum organisation makes a very positive contribution to meeting the school's commitment to equip pupils with knowledge, understanding and skills together with moral, spiritual and cultural understanding. Curriculum provision is effective and inclusive, ensuring pupils of all abilities have equal access and opportunity.

Pupils in Years 7-9 follow all the subjects of the National Curriculum as well as Religious Education. In Years 10 and 11, all pupils follow an extended core curriculum giving them access to English, mathematics, double award science, Welsh, Physical Education, PSE, religious education, health education and an accredited key skills course in Information Technology. Pupils can then choose from four option columns which enables some to study both history and geography or two modern foreign languages. Pre-vocational DVE (the former Diploma in Vocational Education) subjects are introduced and a small number of pupils study NVQ (National Vocational Qualification) in hairdressing at a local college of further education. There is very good provision of an alternative

curriculum for pupils in Year 11 who have a history of disaffection. The programme is taught outside school and effectively combines academic studies, work experience and activities to develop self-confidence and self-esteem. These pupils enjoy the course, their attendance is good and the school closely monitors their progress.

The Key Skills of literacy, numeracy, ICT (Information and Communication Technology), working with others, improving own performance and problem-solving are built into the curriculum. All subject teachers have identified opportunities for their development within the schemes of work and they record pupils' progress in key skills as well as in subjects. The timetable includes compulsory drama and music for all pupils, reflecting the ethos of the school, and there is time allocated for collective worship. All pupils have one lesson of PSE during the two-week timetable cycle and, in addition, the timetable includes periods for meetings between individual pupils and their form tutor each term. In these sessions, the form tutor reviews each pupil's progress, both academic and personal. Good progress is identified, recorded in the pupil's Record of Achievement Progress File and celebrated through the school's merit system and letters of commendation sent to parents. Subject teachers and the pastoral team follow up any concerns as appropriate and pupils in need of extra support receive individual mentoring from members of the senior management team, pastoral team leaders and other staff.

As stated in 3.1 above, the school pays continuous attention to improving teaching and learning. A recent inspection report stated that the quality of teaching is very good. Teachers employ very good questioning techniques, encourage active approaches to learning and allow pupils to take responsibility for their own learning through extensive pair and group work, individual research and the requirement for pupils to present their findings and ideas formally to the whole class. These approaches are also followed in the primary schools from which the pupils come and, at the request of the primary schools, the cross-curricular transition booklet used by Year 6 pupils has a section on learning skills.

3.3 Monitoring and evaluation

Over the past year, monitoring and evaluation of all aspects has taken place through:

- a whole-school key skills review; a review of all 6 key skills across the curriculum through lesson observations, scrutiny of pupils' work, pupils' attitudes to learning etc.;
- termly review by Affective Area coordinator and Deputy Headteacher, Affective Curriculum;
- whole staff meetings focusing on PSE;
- regular area meetings of pastoral teams;
- regular departmental meetings;
- discussion with pupils in tutor groups, in year councils and in school council;
- evaluation of PSE programme and associated activities by pupils;
- a recent very successful inspection by Her Majesty's Inspectorate of Education and Training in Wales.

To assess the added value to pupils' learning, the school takes into consideration:

- standards of achievement in subject-based examinations;
- standards of achievement in key skills across the curriculum, assessed at the end of each module of work;
- assessment of pupils' personal skills through the subjects; e.g. their values and attitudes through geography and drama;
- pupils' understanding of how they learn;
- pupils' self-assessment of own strengths and weaknesses and ability to set targets for improvement;
- pupils' action plans incorporated in individual Progress Files;
- pupils' ability to reflect on the views of others;
- ongoing monitoring of progress by form tutors and pastoral team leaders;
- attendance figures;

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- pupils' behaviour and attitudes;
 - any incidence of bullying or racism;
 - pupils' continued involvement in issues addressed in PSE programme; e.g. Refugee Project in English;
 - motivation of pupils as evidenced in their involvement in extra-curricular events, social events, charity work, community service, school council etc.;
 - analysis of pupil questionnaires;
 - result of recent external inspection.

4 Problems and solutions

The school recognises that social and personal development is at the heart of education and that this is what holds all the subjects of the curriculum together. The school's ethos is well established and all staff are committed to the success of its philosophy. The school is well known for its good quality support and guidance for pupils and attracts staff who are keen to be part of this organisation. All staff strongly support the school's approach and work as a united team to implement its policies. This has not happened overnight but is the result of continued and focused planning and coordination and a genuinely shared vision. Such problems as a teacher's reluctance to move away from a subject approach are not accepted in the school and staff are appointed with the understanding that they will show commitment to the school's approaches.

Work to improve the quality of teaching and learning is continuous and is currently focusing on pupils' differing learning styles and on effective formative pupil assessment for learning.

The school allocates time for regular planning, discussion and coordination and makes good use of expertise and resources from outside agencies and personnel. It organises specialist training for staff as required and uses the ACCAC Personal and Social Education documents for curriculum guidance.

Pressure on the curriculum is still a problem but is alleviated to some extent by the choice of a two-week timetable which allows for a degree of flexibility and breadth. Additionally, this pressure is relieved by taking whole days off-timetable for particular foci, and by spreading much of the factual content of the PSE programme across the subjects of the curriculum.

Any risk of promoting bias and indoctrination of pupils is countered by the fact that pupils examine a range of objective information, often provided by outside speakers who have specialist knowledge, and are encouraged to make informed choices and decisions. This in itself is a major part of their education.

The vast majority of pupils responds positively to the school's approaches and is fully involved in the PSE programme. For a few, interest decreases as they move into Years 10 and 11. The school is aware of this and works to address such lack of motivation by amending its programme and making it more interactive and relevant to pupils of this age and stage of development.

5 Next steps

The school's future plans include:

- full implementation of the findings of the recent key skills review;
- the development of a detailed tracking system to track pupils' progress as they move through the school;
- finding ways to gain accreditation for pupils' achievements in key skills;
- continued sharing of good practice within the school;
- working towards achieving the Basic Skills Agency's Quality Mark for Secondary Schools. This requires a focus on literacy and numeracy with particular attention to the identification and support of underattaining pupils.

The Personal and Social Education Framework, Key Stages 1-4 in Wales is available on the ACCAC website:

www.accac.org.uk

Writhlington School (England): Orchidaceae, a cross-curricular project spanning science and business study

1 School context

Writhlington School is a mixed comprehensive secondary school, catering for students of all abilities in the age range 11-18. It has a roll of 746 students, and serves a mainly rural population in the south-west of England. Ninety-five per cent of the students travel to the school by bus. The proportion of students entitled to a free school meal, at 12 per cent, is around the national average.

2 What are the objectives and how are they implemented?

The school has been using the plant group *Orchidaceae* as a resource for a cross-curricular project spanning science and business studies. This project currently has the following objectives:

- to use vocational science qualification structures to inform the development of cross-curricular partnerships specifically between science and business studies;
- to 'embed' international conservation projects within science vocational courses;
- to increase global perspectives so that 'every sixth former visits our partner tropical country'.

The objectives are 'evolving' rather than planned, to allow for 'unexpected journeys'. Vocational qualification structures are a 'crucial' part of contextualising the science and business studies cross-curricular partnerships, as is the creation of global partnerships. The orchids are also used with younger students in an extra-curricular setting: the 'Greenhouse Club', an after-school club which uses a set of redundant rural studies greenhouses for an expanding collection of orchid plants. Within this setting some members of the club are developing individual botanical and business projects.

3 Implementation strategies

This is a cross-curricular project that utilises an orchid collection as a common resource to develop a range of interlinked partnerships between two subjects in the school and with other partners beyond school. The science and horticulture of orchid reproduction is central to this project being implemented with students at the school.

3.1 Common vision and organisational structures

Current organisational structures include:

- global links with organisations such as the Rio Atlantic Forest Trust and a monastic school in Sikkim, Northern India;
- internal cross-curricular partnerships between science and business studies framed by vocational qualification structures;
- external partnerships with business advisors and botanical organisations such as the Eden Project and the Royal Botanic Gardens, Kew;
- use of student personal portfolios to record the experience and their achievements;
- links with the art department to utilise the orchid collection as a visual resource.

The responses from the interviews with teachers and students seemed to suggest that cross-curricular partnerships are supported by the headteacher and that there is 'a culture of teaching a range of subjects' amongst the teaching staff. One teacher, new to the school, commented that 'cross-curricular themes are talked about' and that these discussions are 'fairly noticeable as a new teacher here'. A key member of the science team regarded the partnership with business studies as an 'evolving relationship' which involved reflection across the curriculum by both departments.

This particular curricular partnership seemed to rely on key teachers with high levels of personal commitment alongside the vision and support of the headteacher, which one interviewee considered *'crucial'*. This way of working is being seen as a possible model for other departments, although the science teacher interviewed was surprised by *'the lack of knowledge about what was going on'* displayed by other staff at his recent presentation about the project during an INSET (in-service training) day at the school. This response suggests that the key players in the partnership strengthen the vision between the departments involved, but the wider distribution of this vision, among the broader teaching community in the school, is at present limited, although some departments such as design and technology were now *'looking more ambitiously at what they can do.'*

The students interviewed felt the project had helped to make them *'more interested'* in their work at school and had helped individual students to *'keep interested'*. They regarded the project as a *'good thing'* because *'it's successful in many ways and we've won so many awards in doing it'*. Several students commented on the process of learning within the orchid project as important: *'I think you get more knowledge when doing practical things rather than just reading about it'*. From the science department perspective the current vision consists of developing the objective of *'every sixth former visiting our partner tropical country'* and *'hoping for a year of consolidation'*.

3.2 School curriculum

The emerging message from both staff and student interviews is that this is a school working within a subject partnership curriculum model. The orchid project specifically spans the subjects of science and business studies. These two departments have had a leading role in shaping the curriculum partnership, assisted by the vocational qualifications framework for the subjects of science and business studies. Students have played a key role in this partnership, for example in creating their own business enterprise known as 'Stem Labs'. A primary element of the project has been to support individual students' interests to develop their own projects; for example, several students are now training to be orchid judges at horticultural shows and training to develop their own specific growing projects.

In developing 'Stem Labs', students were encouraged to be involved in the planning and production decisions of a small business. One teacher felt that the business side of the project offers a *'sense of reality'* to students, in that the horticulture was grounded in *'real direct experience'* within a business setting. An emerging message from both teachers and students is that this is a project which has supported students to *'vision a future'* that includes higher education, by demonstrating a range of careers that previously students may not have considered, as attending university is uncommon in their parental backgrounds.

3.3 Monitoring and evaluation

There were some clear monitoring and evaluation strategies in place, centring on student *'personal portfolios'* and GNVQ⁵ modular results. A major achievement had been *'the highest mean outcome'* of results for students taking the GNVQ science genetics modules. These outcomes also had *'added value'* aspects, in that the project had supported several learners who previously either had challenging behaviours or were school refusers. Several students had taken part in 'Young Scientist of the Year' both in Britain and Europe, and had achieved high places. 'Stem Labs' had won a Young Enterprise award. Students themselves also felt the project had an important role to play in getting *'more young people involved'* in botany and plant science. Several students interviewed felt the project had helped them in other curriculum areas such as English, particularly for presentations, and art.

⁵ GNVQ stands for General National Vocational Qualification. GNVQ courses are available at different levels in a range of vocational areas. They are offered by further education colleges and by many schools as an alternative to academic courses. GNVQs have a modular structure, and each module is assessed separately.

Some monitoring and evaluation procedures, however, were still evolving; one teacher felt that there still was a *'desperate need to track students to compare outcomes with expectations'*.

4 Problems and solutions

One teacher felt that there was an emerging issue with students *'that are included and those that are not'*. He was concerned that only particular students had become part of the project, he hoped that this situation was now being addressed by looking at mentoring between year groups and, in the words of a student, by working with the *'younger ones straight away'*. As mentioned earlier, communication of the project in the wider teaching community in the school is an issue which needs to be addressed. A new head of business studies will be starting in September which *'may well change'* the partnership.

5 Next steps

The science teacher interviewed felt that the last two years of the project had placed it in a position to impact on internal and external partnerships. He thought it was now important to have a year of *'consolidation'*, but recognised that this was *'not necessarily going to happen'*. This cross-curricular partnership was both teacher- and student-led, and was strongly situated in a cross-subject based context with a range of positive outcomes. The next steps, as suggested by those interviewed, are to reflect on what has been achieved and to extend external partnerships with national organisations such as the Eden Project and international ones such as the monastic school in Sikkim, Northern India, to develop a sustainable business partnership based on the growing of local orchids. The cross-curricular partnership has an interesting perspective in that it goes further than crossing the subject divides in the school environment and links with broader communities beyond national boundaries. It is an interesting model given the current interest in Education for Sustainability.

Loreto Grammar School (England): citizenship as a cross-curricular theme

1 School context

Loreto Grammar School is a Roman Catholic school for girls, situated in a suburban area near Manchester, a large city in the north of England. The school is 'voluntary aided' which means it is state maintained, and needs to follow the national curriculum, but the Church contributes to the capital costs and is responsible for running the school. It is also selective – all students are selected by academic ability, and so the school caters only for more able girls. This is reflected in the social composition of the school – as in other English grammar schools, very few students are eligible for free school meals. There are currently 839 students in the 11-18 age range. Students travel to the school from a very wide area.

2 What are the objectives and how are they implemented?

The school is developing citizenship as a cross-curricular theme. The key objectives of the school are to deliver this theme through:

- student-centred participation in governing and pastoral structures at the school;
- encouraging students to be reflective about their learning;
- specific activities across subject areas such as science and geography.

Citizenship education became compulsory in English secondary schools in September 2002. The senior management team (SMT) at the school decided to adopt a whole-school approach to citizenship. The objectives are being implemented through a mapping process which focuses on changing the school's approach to key areas of its work. This process involves the staff team and has its origins in the school's mission statement; they are moving towards a whole-school development plan. One of the results of the mapping process has been the development of themed cross-curricular events such as 'Water Week', which was situated within the school curriculum timetable, and 'Grow a Meal', a project initiated for transitional pupils to work on over their summer holiday prior to becoming members of Year 7 at the school.

3 Implementation Strategies

3.1 Common vision and organisational structures

Current organisational structures include:

- students developing individual self-assessment portfolios (which are generic, not subject-based);
- supporting staff to contribute to a whole-school citizenship mapping process;
- providing In-Service Training (INSET) in citizenship for the staff team;
- developing mechanisms to sustain a greater organisational involvement with the student voice.

Although some interview respondents felt that the school was working towards a common vision for citizenship, as a cross-curricular theme, there were others who were more reticent. The citizenship co-ordinator felt that their approach came as a '*natural progression*' from the school's ethos and that using the mission statement as a base '*makes it effective for getting commitment from the staff. It also gives a rationale to the pupils as well*'. This perspective was reiterated by the deputy headteacher who felt that for the inclusion of citizenship to be '*really effective*' it has '*got to be implicit in the school*'. This commonality of vision was not shared by all staff; some felt that '*everything needs to be piloted*' and thought that a subject-based route in history and geography was '*the most sensible route at the moment*'. Clearly there is a range of viewpoints current among the staff team.

The responses from the student perspective suggests that they have particular notions of what citizenship is: *'I think citizenship is about learning to be like a community and being like as a whole with everybody and you learn to contribute'*. Some students are also clear about how it differs from other learning in school: *'you use the things that you learn everyday not like maths, but this you see every day and put it into practice'*. However, they have concerns about how citizenship is delivered and the ways in which it is highlighted in their studies. For example they considered the retrospective annotation of their work as *'citizenship'* as peripheral to *'what citizenship is'*. Some students were concerned that their reflections on citizenship achievements, both as individuals in school and in their larger communities, were just *'written down in a folder'* and not developed.

Organisational frameworks were still being developed, particularly for implementing objectives concerning student participation in school governing and pastoral care. Both the deputy headteacher and the citizenship co-ordinator were keen to see these new practices put into place, but were aware of the issues involved in supporting pupils build the new skills necessary to take on these evolving roles. The citizenship co-ordinator had concerns that currently the process *'very much depended'* on her and *'a few key characters'*. She noted that the process now *'needs to move out'* and embrace the *'student voice'*. The next stage, she felt, is to set up a citizenship steering committee involving sixth formers.

For staff the introduction to the whole-school approach to citizenship has been through two INSET days. The citizenship co-ordinator was keen to draw out the more reticent members of staff, who preferred the subject-based approach mainly because *'they didn't think they had a role to play'* in the wider setting. In focusing on these staff specifically, the co-ordinator believed that they were now very involved and *'buzzing with it'*.

3.2 School curriculum

From the evidence presented by the staff and student interviews and supporting documentation, the emerging message appeared to be that of a school working towards an integrated model of cross-curricular working in that the citizenship theme is being applied throughout aspects of the school. The deputy headteacher is keen to see the student voice embedded in a whole-school approach through supporting pupils to take part in departmental, governor and pastoral meetings: *'It is really seeing if we can make this work with the girls in meetings, by formalising or making normal that expectation'* with members of staff and the student community. She recognised that some teachers do have concerns about involving students more in the management processes of the school and noted that *'we have to discuss it, it might be that we look for pilot departments to do it'*. Both the deputy headteacher and the citizenship co-ordinator felt that the coming academic year would be an important time for developing this new management culture. At present students are involved in a mentoring scheme between pupils supported by teachers. The citizenship co-ordinator hopes that *'soon this will be out of the hands of form tutors'* and be led and assessed by Year 10 students. The deputy headteacher sees *'girls' self-confidence and their ability to mentor being developed through citizenship'*.

In terms of shaping the curriculum, some departments took responsibility for leading on cross-curricular activities, for example 'Water Week' which this year was led by the science department. Other departments such as geography had a more subject-based view of the cross-curricular theme, for example the head of the geography department considered citizenship an *'important stem of geography'*. In regard to impacts on learners the citizenship co-ordinator felt that certain cross-curricular activities such as 'Grow a Meal' had led to more *'collaborative learning'* processes among the students involved. She also felt that the implementation of the cross-curricular theme was resulting in *'making the pupils more articulate and more involved'*. Clearly, as with staff and student views on their visions of citizenship as a cross-curriculum theme, how the curriculum is shaped is dependent on a variety of perspectives and how well the current mapping process weaves those views into a common vision.

3.3 Monitoring and evaluation

The school has developed several monitoring and evaluation procedures including:

- parents, teachers and pupils negotiating individual pupil targets: 'that's new this year and that has come out of citizenship'
- pupil self-assessment: 'This year was a trial because progress files are coming in now so this will incorporate into that'
- mentoring skills: 'we are working hard on mentoring skills at the moment'.

As this is a school seeking to have the cross-curricular theme at the core of school life, the monitoring and evaluation processes are common throughout the school and applied in both subject and pastoral contexts.

4 Problems and solutions

The school is currently looking at mentoring structures between peer groups and between different year groups and any potential problems involved in those structures: *'No good an 18 year old saying what an 11 year old needs. We are really into exploration at this point, but that is one example that would be really critical to the life of the school'*. The deputy headteacher noted that *'the checking has to come in a mechanism of evaluation reflections'*. There was an awareness that the mapping exercises *'need to be visited very regularly'* and problems might otherwise occur, particularly as there was a wide range of views of the cross-curricular theme among both teachers and learners.

5 Next steps

The citizenship co-ordinator is keen to set up a citizenship steering committee: *'I want to get some of the sixth formers involved - I think that is the next stage'*. The school is investing in a radical alteration of their management culture in seeking to support structural and ideological changes to *'embed student voice'* into the heart of their practice. The implementation of the cross-curricular theme of 'citizenship' is a central part of these ongoing and proposed changes. Embedding student voice into the management structures is still at the planning stage, but student involvement in the pastoral support structures is now clearly situated in the cultural fabric of the school. It would be interesting to re-visit this school in a year's time to ask questions about perceived changes to school life and to ask both students and teachers what they thought about the experience and any discerned impacts.

The Alternative Secondary School for Economics (AKG), Budapest (Hungary): social studies

1 School context

The Alternative Secondary School of Economics (AKG) in Budapest is a 6-year secondary private school. AKG has a remarkable history as Hungary's first "alternative" school. The specific goal of its founders was to create an institution that provided educational alternatives for its students in a free, individual-oriented setting, developing a program strongly connected to the educational reform characteristic of schools at the turn of the last century. The school provides education in grades 7-12 for about 400 pupils, aged 12-18.

2 What are the objectives and how are they implemented?

In order to illustrate the significant role of *social studies* in AKG's programme, it is worth mentioning a few of the circumstances that led to the establishment of the school in its present form. These are provided in addendum 1.

The most important basic principle underlying all of the activities taking place within the educational programme and pedagogical approach implemented at the institution is the idea that a child is not preparing for life, but is living it. Training is therefore personality-oriented and focuses primarily on developing the abilities of individual students, with a heavy emphasis placed on cooperative-interactive methods. This is particularly true of social studies, which embraces a wide array of subjects and a host of related themes and sub-topics, not only within the lesson framework, but also in terms of specific skills pupils are expected to develop both inside and outside of the classroom. The content of training materials - an overwhelming majority of which have been developed by AKG staff - is compatible with the standards set by the current national curriculum, although the nature of individual lessons is largely determined by the requirements of the given subject, the age of the pupils involved, and their personal motivations and skills. Thus, classroom activities and supplementary materials are designed with the latter in mind, and the dominant element in the teaching of different subjects is the personal development of the pupils themselves. Knowledge of material content is considered of secondary importance.

The school would like its students to develop behaviour based on a humanist system of values and strongly believes that becoming familiar with other peoples and cultures will lead them to form a higher degree of empathy, tolerance, self-respect and self critique as they grow to become active adult citizens in their community. This demands an extensive knowledge of social values as well as the ability to perceive connections between social, economic, political and historical phenomena in light of their own personal experience. Consequently, social studies at AKG represents a complex discipline that appears directly or indirectly on several levels: as a set of concrete subjects and closely related themes within the lesson framework, in various learning techniques used in the classroom to acquire knowledge of other subjects, and in the form of the hidden curriculum behind the daily activities and interaction that comprise life in the school community as a whole.

3 Implementation strategies

3.1 Common vision and organisational structures

AKG is a free school in that it has rejected traditional instruments of institutional regulation i.e. house rules, systems of punishment and reward. These have been replaced with the free flow of information and the freedom of choice, tailored to the personalities, needs and interests of individual students. Since the nature of this freedom changes in accordance with the different stages of the students' life in the school, guidance during this period of transition from adolescence to adulthood takes place within a family atmosphere characterized by continuous and direct personal contact between students and teachers. This is especially critical for younger pupils (grades 7-10) in their

everyday environment, but remains no less important at later stages (grades 11-12), when individual students begin to take on additional rights and responsibilities as free citizens of the school. In this sense, freedom means sovereignty, the right to enter into agreements, a role in the community and participation in its affairs. This can only be accomplished through constant communication and co-operative feedback, both during lessons and outside of the classroom. It is with the goal of maintaining this kind of contact that AKG developed its fundamental organizational units and activities:

Micro-schools. Each separate grade within the school consists of approximately 50-60 students and a faculty of 6 educators (usually responsible for teaching their own specialized area of study), who remain as one unit for the entire duration of the 6-year training course. As such, these communal entities provide an opportunity to merge the interests of individual students with those of the larger, student-centred institution.

Patrons. Fulfilling the role of “parent” in the school context, each of the 6 teachers on a micro-school faculty also act as patrons chosen by smaller groups of 10-12 pupils in the given grade to guide and represent them throughout their time in the school. The patrons are chosen by pupils individually at the end of the starting camp at the beginning of the first year. Children name three teachers whom they would like to be their patron. Since patrons are in the position to directly reflect the principles of the school, the pedagogical techniques they adapt aim to assist students in getting to know the world around them, facilitating the development of values and norms conducive to co-operative relationships. Patrons must devote time at least once a week to students individually and also together as a group. These weekly sessions serve to inform students about school issues and upcoming tasks, but also present an opportunity for extended discussion. Although the “nest” of students under a patron is not organized for the purpose of study, these regular discussions have become increasingly important in terms of social studies content since they often touch upon social issues - directly or indirectly - that students have been exposed to in the framework of lessons and in the course of their daily life.

Epochs. Basic subjects on the lower-intermediate level (grades 7-10) are taught in study “blocks” and appear on different levels in various forms, depending on the subject and the age of students. Certain subject blocks consist of “epochs” - 85-minute and 60-minute lessons held over a period of approximately 3 weeks (history, natural sciences, mathematics, literature, arts) – concentrating on the in-depth study of one particular subject. Topics covered in epochs may include material from several subject blocks in a project format, designed to explore a given theme from as many aspects as possible and utilizing a wide range of interactive learning techniques.

Theme weeks. Similar to epochs in that they provide an opportunity to deal with a particular theme over an extended period of time, theme weeks frequently involve a complex series of tasks conducted in the form of field-work outside of the classroom. Implemented on 4 occasions a year, such projects offer a variety of circumstances in which students can make use of the skills they have acquired, and generally demand an interdisciplinary approach from both students and teachers.

Needless to say, maintaining the effectiveness of these organizational units within the larger institution and coordinating the tasks of patronage as well as the activities taking place inside and outside of the lesson framework requires a considerable amount of time and energy on the part of all involved. A team effort aimed at promoting an open exchange of experience, knowledge and creative ideas among faculty members in order to sustain continuity is essential throughout the entire process. This applies not only to the functioning of the school on a daily basis, but also to the development of long-term solutions to problems inherent in the establishment of cross-curricular themes, both of which have come to be closely inter-related.

3.2 School curriculum

The training program divides activities into two progressive phases designed to correspond with the needs of students at different age levels. The basic phase (lower-intermediate, grades 7-10) is a period of general study characterised by a practical, problem-solving approach to learning. Activi-

ties focus on the acquisition of knowledge through personal experience and lessons tend to stress group work, role-play and interactive discussion as well as some independent study. The second phase (upper-intermediate, grades 11-12) concentrates on alternative, often specialised, courses of study. Training here is goal-oriented and offers a broader range of choices. Students are encouraged to develop their own unique schedules according to their needs and interests, with a stronger emphasis on independent study.

Despite a clear differentiation in the way training is conducted at different levels, the overall methodological approach in the teaching of all subjects incorporates “social studies” skills, many of which can be regarded as directly corresponding to the values underlying the pedagogical principles of the school as a whole, such as intellectual skills, social skills, communication skills and personal skills.

Concepts that appear in lower-intermediate social studies courses under the title “Study of Co-existence” (community, social norms, ourselves and our environment, values, customs, appropriate behaviour, cooperation and competition, personal, legal and human rights etc.) already reflect the development of these skills. Some of these were contained in the original social studies curriculum, but are now presented in an alternative format. Micro-schools enjoy significant freedom in choosing how to implement social studies in the lesson structure. Hence such topics are often dealt with in separate lessons held by patrons (who may also be teaching the same students history) or can be incorporated within the context of regular discussion between individual patrons and their “nests”.

The epoch format in itself dictates that group work and dramatic games are an integral part of the learning process. Lecturing by teachers is only one part of the lesson framework; students work through numerous topics individually or in groups. The teacher merely acts as a guide, organizing activities and providing assistance.

Extended projects, theme weeks, various school camps and club activities focusing on a variety of subjects are organized along the same lines.

3.3 Monitoring and evaluation

Written evaluations at the end of each semester by subject teachers as well as patrons are a central component in the assessment of students’ progress. They tend to focus on aspects of their own personal development.

“Social studies” skills cannot realistically be evaluated in terms of completed units, but the rate of skills development, knowledge of specific material content and the overall performance of individual students in accordance with their personal abilities can - it remains up to the discretion of the given teacher as to what features are stressed and how. Students at the lower-intermediate level receive no marks, but their progress is consistently checked through the use of other methods, such as percentage ratings given for various aspects of their work. Most teachers will also include a general description of their requirements along with their personal evaluation of a given student (cf. addendum 2).

The issue of how social studies courses are handled during the first 4 years may be treated differently in different micro-schools. This gives rise to serious questions regarding the consistency of assessment in this area (see: 4. Problems).

In addition to evaluations written by subject teachers, students also receive separate evaluations from their patrons, and it is here that personal development comes to the forefront. Addendum 3 provides excerpts from an evaluation written by a patron for a 7th grade student (age 13) at the end of his first semester in the school (after reading all other evaluations submitted by subject teachers for the same student).

Written evaluations received by students are supplemented by regular verbal and written assessment throughout a given semester. Once again focusing on the development of skills, the school attempts to provide consistent feedback on the individual progress of students after they have

completed specific tasks e.g. following the end of an epoch, upon completion of major tests, projects etc. This may be done either in the form of discussion with an entire class, pointing out major strengths and weaknesses in relation to overall performance, or in personal conversations between the teacher and individual students. Written work (essays, diaries, tests etc.) is corrected in a similar way; the school prefers taking time to write comments and suggestions as opposed to simply marking papers with checkmarks to indicate “right” or “wrong” answers. Such assessment is vital, both in terms of tracking students’ development as well as giving them immediate feedback on the results of their work. The school also recently introduced a “skills test” administered to students at the end of the 10th grade in order to provide a comprehensive view of their competency in all areas of study. The results are rated on a scale ranging from insufficient to satisfactory and indicated to students in the way of an official “certificate”.

4 Problems and solutions

AKG in its present form is in many ways an “island” on itself and continues to represent an approach radically different from the norm in current Hungarian education. At the same time, the school’s view of what education should be in theory does not always correspond to what actually happens in practice. This is partly due to the expectations of the society in which the school exists and partly because its approach creates difficulties of its own.

The outside world. Generally speaking, Hungarian society still demands a high degree of theory-based, factual knowledge from its students as a standard of achievement, and this is also reflected in the fact that parents, students and institutions of higher education require tangible evidence of this knowledge. This means for the school that the emphasis on skills development in the classroom is often undermined by the need to provide students with the amount of knowledge they need to successfully meet the requirements of both final exams and university entrance. Consequently, history and other related compulsory subjects, particularly on the upper-intermediate level, cease to act as vehicle for examining current issues because there is not enough time to cover the required material content. In addition, social studies as a subject within the framework of national curricula is interpreted in a variety of ways on the local level.

The school. Because of their autonomous nature, micro-schools have a tendency to become too isolated from one another. Despite having significant freedom to modify their programmes in accordance with their specific needs, they are not able to appropriately transmit their pertinent experiences to the entire faculty in the interest of maintaining consistency. The result is a variety of different approaches in social studies courses, which may work well within the context of a given micro-school, but cannot be effectively adapted to others. Even though the school’s own social studies textbooks for the lower-intermediate level define specific themes, there is still no general consensus among faculty members regarding uniform implementation, and this only serves to increase inconsistencies in terms of approach. Sufficient comprehensive documentation of theme weeks and other projects for the benefit of colleagues in other micro-schools is also sporadic at best.

Teachers. A further problem is the fact that adequate teacher-training in the area of alternative pedagogy is still lacking, which often means that teachers must gain experience with unfamiliar, improvisational techniques on a trial-by-fire basis. Add to this the fact that many educators in the current system also either grew up and/or worked in a traditional school environment and sometimes have difficulty in staying with the idea that the school “teaches students, not subjects” i.e. training students how to find and process information as opposed to pouring it into their heads. Here again, there is a wide range of interpretation regarding social studies as a subject, and this is also apparent in how different faculty members approach the concept of assessment. There is also the issue of time: maintaining a student-centred approach requires a great deal of energy and does not always leave enough time to share experiences and assist each other.

Students. Given that social studies courses in the basic phase of training at AKG often deal with difficult issues that require considerable discussion, students also face dilemmas in terms of how to regard their participation as well as the interaction it requires. It is imperative that the teacher be

accepted as a partner, and this is frequently a long and delicate process. Indeed, social studies from this aspect is not something that can be considered a “traditional” subject, and so pupils sometimes have difficulty understanding that an honest exchange of opinions, drawing on their own experiences and knowledge, also requires work in order to be effective. They tend to view discussion as a form of leisure, making constant preparation and improvisation on the part of the teacher essential to the process.

In light of the above, it has been proposed that the number of social studies lessons be increased in both phases of training along with the introduction of more theme weeks. It would seem, however, that before anything is done, the faculty must reach a consensus on exactly what the subject of social studies comprises and take steps to adjust both short and long-term strategies accordingly, with a specific focus on how these are to be implemented on a uniform, practical level that can be adapted to each micro-school. Another important question that has yet to be addressed is the issue of who is most qualified to teach the subject. If social studies on the lower-intermediate level are to be the task of patrons, then the development of a comprehensive training program for patrons entering the school seems a logical step.

Problems notwithstanding, social studies training at AKG continues to perform an essential role in the implementation of cross-curricular themes, and remains to act as a direct link to the basic guiding principles of the school.

Addendum 1

Founded 13 years ago as a 4-year institution, AKG then held the distinction of being not only the first foundation school in Hungary, but also the first “alternative” one. As the name implies, the specific goal of its founders was to create an institution that provided educational alternatives for its students in a free, individual-oriented setting, developing a programme strongly connected to the educational reforms characteristic of schools at the turn of the last century, and in direct contrast to the educational system prevalent in Hungary before the political transition of 1989.

Education under the Kádár regime had put a heavy emphasis on sciences and was characterized by a traditional frontal approach to teaching, which not only placed the acquisition of material content and theoretical knowledge in the forefront, but also maintained a strict division with regard to the role of teachers and students. The educators who founded and organized AKG aimed to break from this tradition in the form of an independent pedagogical workshop designed to put the individual student at the centre of its activities, with a specific focus on meeting the demands of students and society as a whole. The task, therefore, was to create circumstances where young people could make alternative choices corresponding to their natural abilities and personal motivations and their social and cultural backgrounds in an atmosphere of communal interaction, through the experience of living their daily lives. In this sense, social studies in the school’s pedagogical and educational programme has always played a prominent role in the development of thinking in terms of society, meaning an emphasis on people, lifestyle, social structure, values, mentality and everyday life. Furthermore, this approach has to a greater or lesser extent become the prominent filter through which a large proportion of subjects within the curriculum are taught, and the skills it promotes have been a vital element in the basic organizational structures and activities of the school from the very start.

Legal circumstances in the beginning dictated that the school operated as an experimental foundation school in co-operation with the Ministry of Culture and Education, hence a state school, but one ensuring complete autonomy to its faculty and to those with direct interest in its successful operation i.e. students, parents, teachers, businesses in the community. The concept of a 6-year secondary school already appeared in the original program, but it was only after new education laws were passed in 1995 that AKG was able to implement this strategy. Unwilling to leave its independence at the mercy of political changes, the faculty opted for a foundation status the following year, which resulted in AKG becoming a fully independent organizational entity. Establishment of the 6-year structure in no way meant a digression from the basic principles and was in fact an opportunity to apply the original pedagogical goals in a more coherent format.

Addendum 2

“The basis for assessment in the subject of history was students’ performance during the four epochs, one smaller project and the ancient history theme week. In every case, I took into account work during lessons - students’ attitude towards the subject, level of activity, group work (20%) - the content of diaries(10%), and the results of tests at the end of each epoch(70%)...

The Study of Co-existence this year was a discussion subject...and evaluation was based on the activity itself; interest and participation in the discussion.”

Addendum 3

“...At this age, meeting the expectations of the peer group takes precedence. XY also did everything to be accepted by his mates and sometimes felt he had to act like the ‘big boys’ do. Having made friends since then, even among some older students, he no longer needs to pretend... His ‘struggle’ to assimilate was not always free of conflict - sometimes in the physical sense as well - but we were able to deal with this right away. Nowadays, he seems to be showing his real personality. He enjoys playing games (and spends a bit too much time in front of the computer) and is an excellent game master, which is when his creativity really shines. He’s reliable and a good organizer, and when he’s interested (school bazaar, field trips) will devote serious energy to the task at hand. Although he’s often less than enthusiastic about the preparation phase, one can always count on him in critical moments...I think we have a good relationship; he listens to my advice, but I can’t say he always follows it. I’m usually the one to initiate conversation; he won’t come to me with problems on his own – not even in connection with his studies. Sometimes I feel that he’s just hoping the problem will disappear by itself. I think that perhaps the main problem in this area is his lack of organization (lost notebooks, missing homework assignments etc.)...He’s quick on the uptake, but is unwilling to ‘waste time’ by delving more thoroughly into a given subject, so his knowledge remains superficial, which means that he’s often bored during lessons...Sometimes he gives up even before he starts to work - after all, actually doing the exercise would mean having to think! Taking into consideration his sharp intelligence and creativity, the results of his work leave much to be desired. He’s generally more successful in science subjects, but what disturbs me the most is the low standard of his work. His final tests in the area of humanities show that he just wants to ‘get over it’ as soon as possible...”

Remetekertvárosi Általános Iskola, Budapest (Hungary): environmental education

1 School context

Remetekertvárosi Általános Iskola is an 8-year elementary school in Budapest. Connected to and only used by the school is the educational centre for studies on nature and environmental protection. The school provides education for children aged 6-14.

The school's motto is: "To see the challenge facing us; dialectically aware that all sciences are interdependent: as literature is to botany by means of, for example, vegetables."

(Ottó Orbán)

2 What are the objectives and how are they implemented?

- Subjects dealing with connections between phenomena in terms of natural science: intensive study of nature and the natural environment, physics, chemistry, biology, the study of native Hungarians and other peoples, mathematics, ICT, health, the earth and the environment;
- Subjects exploring a wide variety of connections between humans and their environment: Hungarian language and literature, history, human ethics-social studies, physical education and sports, intensive foreign language study;
- Technology and lifestyle: how different technologies influence the environment in daily life;
- Human ethics-social studies: promoting environmental values, personal philosophy and environmentally conscious behaviour among citizens;
- Subjects communicating the beauty of both the natural and constructed environment: drawing and visual culture, music, singing, dance, drama, moving pictures and media studies, Hungarian language and literature.

In light of the above, all subjects represent important "parts of the whole" in terms of fulfilling the broader spectrum of requirements.

Environmental education as an integral element of teaching in various subjects already played a significant role in the local curriculum that the school re-examined and modified during the 1998-99 school year.

Colleagues in different faculties (junior, educational, humanities, science, languages) worked in groups to develop their proposals in accordance with previously approved teaching materials, expanding these with environmental themes and taking into account the characteristic of students at different age levels.

It should be mentioned here that it was perhaps the science faculty who had the "easiest" task since environmental education in every respect is most closely connected to subjects involving natural sciences. As all members of the staff contributed their own experiences in relation to the most effective methods and activities used in their daily teaching practice, the resulting list of proposals was designed to achieve a maximum degree of pedagogical continuity.

The faculty heads met several times to ensure that the written curriculum was produced in a clear, easy to understand and applicable format. The most rational and crystallized version was submitted to the top management of the institution (director, assistant director of education, assistant teaching supervisor) along with suggestions for modification.

The school made every effort to divide the tasks involved on an equal basis, but in the end, the dominant principle was that specific work should be delegated on the basis of "who was most suited to do what". A work team of 10-12 members created the final version of the rough draft, a process that lasted almost 2 months since the modified materials comprised nearly 500 pages full of different charts and diagrams. The entire endeavour, from the birth of the original concept to the final approval and registration of the pedagogical programme, including all supplementary materials, took approximately 1 school year. Today, the school is proud to have devoted time and energy to making this important step, the results of which it continues to use every day in the classroom.

3 Implementation strategies

3.1 Common vision and organisational structures

- The school's common institutional goals have been developed in full agreement by all members of the faculty in order to create a school that more closely resembles the European model of education and behaviour, training children to achieve a greater sensitivity to their fellow humans and their environment. The school believes that making environmental education a central motif can also be realized through the pedagogical approach. In contrast to the traditional practice of most schools, the aim is not to "teach" knowledge to children, but to assist them in "living it". In this way, the school is not simply a model of reality, but also offers students the reality of personal experience within an institutional framework.
The main goal is to raise students who are capable of taking their personal destinies into their own hands, ready to lead constructive lives, able to perceive connections and maturing to become understanding citizens. They should be aware of the legal opportunities necessary to achieve both their personal interests and those of their community, accepting of others, and yet able to recognize possibilities to develop their own talents.
Taking this into consideration, the system of goals focuses on complex personality development i.e. to promote independence, self-sufficiency, a desire for knowledge, realistic self-awareness and assessment, an appropriate attitude towards hard work (diligence, fastidiousness, determination) and cooperation. Also essential are the development of individual talent and ability as well as efforts to alleviate difficulties in connection with social disadvantages, adaptation, behaviour and learning. The school places a strong emphasis on encouraging universal human values - humanism, patriotism, honesty, a sense of responsibility and commitment - and aims at continuously raising the standard of its work and at further developing the pedagogical culture of the faculty.
- Environmental training and education is a process directed at clarifying different concepts with respect to the environment and serves to achieve the recognition of environmental values. As such, it aims to facilitate the development of skills necessary to understand mutual connections between people, their culture and their environment with a view towards promoting environmentally conscious behaviour and the ability to take responsible action.
Environmental training cannot only be the transmission of theoretical knowledge. It is imperative that training-education *about the environment* should take place *in the environment* and *for the environment*, in keeping with the principle that "all things are connected" – using environmentally appropriate methods. In practice, therefore, the school tradition dictates that environmental training appear as an integral element of both the curriculum and the cross-curricular system in addition to activities conducted outside of the lesson framework.
Today, the school has reached a point where every member of the faculty handles environmental education *professionally, institutionally* and *systematically*. The school committed itself to a unique educational and learning format in which the following elements are vital in order to achieve effective results: project methodology, open-air classes, extended field trips, school garden programmes, theme days, theme weeks, "green" lessons, special days, camps, clubs, competitions. The interpretation of environmental training is a *holistic* one, using methods designed primarily to shed light on various connections, and it is also for this reason that it became necessary to re-examine teaching materials in different subjects so that cross-curricular themes could actually be integrated within the school culture.
- In the planning stage, difficulties frequently arose in terms of coordinating environmental themes among different subjects – after all, not every subject is conducive to incorporating environmental topics indirectly without seeming to force the issue at all costs. For this reason, it was often thought best to treat the holistic approach with flexibility and leave certain topics open in order to avoid going to the other extreme.
The conditions for cross-curricular work were that the overwhelming majority of staff should have a theoretical background in environmental education (internal and external training programs) and have often participated in consultations as guest lecturers. Enthusiastic colleagues have indeed taken part in numerous different courses over the last 14 years, but unfortunately have not been able to find a course entitled "How to incorporate environmental training into different school subjects". The reason for this may be that staff were acting as

pioneers when they assembled materials 5 years ago. On the other hand, since faculty members have participated in so many training courses, the team has also been able to organize its own internal training structure. The environmental training faculty consists of the students attending the school, the community of educators and an active group of parents (approx. 500 people). The team leader has also completed a training course for “Eco-school” managers, supported by both the Ministry of the Environment and the Ministry of Education, and organized by the National Institute for Education in the 2002-2003 school year.

3.2 School curriculum

- The school applies an integrated curriculum approach. It wishes to present students at each class level with a holistically interpreted environmental “whole”, keeping in mind the traits and subject knowledge of students in different age groups. The school strives to bring new colour to the training-education methodology, utilizing the conditions provided by the immediate environment, the consequent result being a cross-curricular system that focuses on annual projects, field-work and lessons conducted both in nature and the classroom (lessons held in preparation for field trips) within an integrated structure of activities. Particular emphasis is placed on learning to use tools of observation (laboratory practice, simple instruments used for examining environmental factors).

Project methods are based primarily on cooperative-interactive learning techniques, a unique study arrangement - or way of obtaining knowledge - that always focuses on a real problem and a concrete task. By the time they complete the given project, work groups are typically expected to have created a material or intellectual product that examines the topic from the widest possible range of aspects. In this way, students are obviously “forced” to search for and discover connections.

Much in contrast to traditional, knowledge-centred learning structures, there are no ready-made truths here. The concrete existence of unique problems in itself dictates that they are not approached on a theoretical level, but in a way that requires developing a realistic solution to a genuine challenge. Theme days and theme weeks that concentrate on delving into a particular topic are organized in the same way, and activities and projects undertaken outside of the classroom are usually referred to as “open-air schools”.

Projects for each class level are centred around 4 main themes and take place outside of compulsory lessons in the curriculum, but are nevertheless integral parts of the cross-curricular system:

- Basic conditions for life on earth (the lifeless environment: soil, water, atmosphere);
- Energy;
- The protection of flora and fauna;
- Humans and their world (human ecology, the protection of soil and habitat, noise content...).

The proportion of individual themes may vary from class to class in accordance with the knowledge and characteristics of students at different age- levels, but they occur in a spiral structure and reappear at a progressively higher level each year. It is this approach that works to ensure that aims in connection with environmental training are met.

- It is in activities outside of the school that the most spectacular success with cross-curricular themes is achieved. The school is convinced that the obvious reason for this is that there is nothing more effective in terms of environmental training with children than when they must use all of their senses to experience the “new knowledge” which they should acquire. As a consequence, field trips can take place in both the constructed and the natural environment, and a sensitive, student-centred pedagogical approach is essential in both situations. Field trips consist of environmental projects approved in the pedagogical program and the cross-curricular lesson plan, broken down into integrated activities tailored for each school year, in the course of which all students have a good time while increasing their knowledge of the environment and the world around them. The following is a practical:

- Theme: Energy;

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- Sub-topics: The origin of electricity, the dangers of its use, and aspects related to environmental protection;
 - Location: Museum of Electro-technology (with the help of an outside lecturer);
 - Participants: 6th year students.

Pupils had received advance preparation during a lesson held by the physics teacher, who had also given classes problem-solving tasks to do in advance. An example could be research in the library concerning a specific issue: what kind of environmentally friendly energy sources have you heard of? Where can these be used? Do we have any of these? Where can we find such energy sources in Hungary?...

During such field trips and other similar projects, the interest and motivation of students far surpasses the level of a “dry physics lesson” – and they actively participate in manual exercises with a much higher degree of enthusiasm.

- Another highly popular cross-curricular programme requiring serious preparation is the so-called *forest camp*, held every year. The number of colleagues and students who attend has steadily increased year by year as this unique form of learning provides a wide range of possibilities for the integration of different subjects in practice. All classes on the upper level make use of this opportunity, but there are some groups with entrepreneurial spirit on the lower level who also rise to the challenge. Those on the lower level who choose not to participate in the Forest School may choose the *open-air school*, which means they take day tours to the sites most closely related to their subject of study, but do not spend the night there. Forest Camps should always last for at least 5 days - while Open-Air activities take a minimum of 3. Form teachers have complete freedom to make the final decision, but they are responsible for all of the related organizing activities. When the cross-curricular programme was created, simultaneously a catalogue containing all of the proposed *forest camp locations* was assembled, which assists each class in choosing a site that comes closest to offering a variety of connections to their studies during the given school year. For example, the 6th grade – Eger and the vicinity because of their study of the famous novel *Egri Csillagok* [The Stars of Eger] during Hungarian literature lessons, the 7th grade – Debrecen, in connections with their history studies, etc. Naturally, these serve only to provide ideas and are by no means compulsory. Effective communication between form teachers and subject teachers is essential in the practical planning phase, but the assistance of the librarian and the head of the environmental studies faculty is also useful. It is necessary that the planning sheet and the corresponding programme be approved by a professional committee in the interest of quality work, and it are these approved programmes that are submitted to various institutions who have announced competitions. Several of the school’s teaching methodology handbooks (e.g. the experience of annual projects, *Zöld Morzsák* [Green Tidbits] I-II-III-IV) and alternative textbooks (Techniques for Recycling Waste, Environmental Studies in Hungarian + Mathematics Lessons) have also been distributed by various publishing firms.

3.3 Monitoring and assessment

Assessment of cross-curricular implementation is the responsibility of heads of faculty and the director of the environmental training staff. Unfortunately, this is quite a difficult task since faculty heads cannot permanently observe pupils nor visit all staff classes. When lesson plans are approved at the beginning of the year, however, strong emphasis is put on assessing environmental training themes and topics which should be prominent in terms of subject-integration are agreed upon. During the middle of the school year, lessons are visited by the directors, who examine the students’ notebooks and compare them with the lesson plan submitted by the given teacher. This may seem a bit strict, but all of the colleagues should regard this as a positive attempt to assist them – after all, everyone participated in making modifications to the curriculum in order to effectively accommodate cross-curricular themes. Naturally, subjective elements cannot be ruled out here either. Not every colleague regards the integration of cross-curricular environmental training themes in the course of everyday practice to be equally important, and they cannot realistically be expected to do so.

It would be very artificial, for instance, to discuss the composition of blood-soaked soil during a history lesson in connection with the Battle of Mohács. On the other hand, the effects of the industrial revolution on the environment are certainly worthy of discussion. Again, this is an issue of common sense, and so a principle of flexibility is maintained as opposed to pushing the integration of “green topics” at all costs. The pedagogical freedom of staff should not be threatened, but the lesson plans for a given school year must be compatible with the cross-curricular plan approved by the faculty and with the pedagogical program.

Group leaders are responsible for the quality of field work activities, but “evaluation forms” for use by both students and teachers involved in field trips have been developed as well. Following a given field trip, students fill out the forms in groups of 2-3 during lessons with their form teachers and are generally happy that their opinion is being asked for. The director of the environmental training staff compiles the data and presents the results to the given group leader. In this way, teachers who lead students on field trips receive immediate feedback on their work. Evaluation forms are extremely useful and sometimes painfully honest, but students will also gladly express their opinion about things that they liked.

4 Problems and solutions

- After 14 years, there are fewer and fewer problems in connection with “environmental training on a daily level”, but this was not always the case. At the beginning, a lack of experience, competence and self-confidence to a certain degree caused temporary difficulties. The school managed to correct these within a few years by developing a system of in-service training and with the help of post-graduate courses. Cooperation was never a problem since it was agreed in common to develop changes in the profile, and rationally planned teamwork soon produced spectacular results. Of course not everyone worked together with the same degree of enthusiasm, but this cannot be a goal with a teaching staff consisting of 37 individuals.
- When cross-curricular themes were introduced, the biggest problem facing many colleagues was the lack of time to supplement teaching materials with the new elements, and unfortunately, this remains a problem up to the present day, even if to a lesser extent. A solution has yet to be found, so attempts are being made to alleviate the situation by regrouping themes within subject cycles.
- Continuously maintaining the students’ interest is the greatest challenge since they quickly become bored if they always have to do the same kind of activities. There was a case when a class was given the same set of tasks on a field trip 2 years in a row, and they expressed their dissatisfaction about this in no uncertain terms on the evaluation forms. Such “mishaps” can be prevented by more integrated planning and organization.
- When the environmental training programme was introduced, little was available in the area of teacher training related to this approach, and almost nothing in terms of accreditation. It has been the school’s experience that environmental training has only become “fashionable” in recent years, and the number of teacher training programmes has increased in direct proportion to this newfound popularity. Many of the staff have successfully completed “green” courses over the years, and some of this experience has been built into practice. Other courses, however, were only good for making useful connections. So far, the school has not encountered courses dealing specifically with cross-curricular development.
- *Special days* have now become a natural part of cultural life in the school, but the division of tasks in the course of developing them has caused serious problems i.e. who is responsible for which Special Day? Are all of them to be organised by natural science teachers? In spite of this, the school almost succeeded in finding a practical way of dealing with this “common burden”.

5 Next steps

- Long-range plans include winning the title “*Ecoschool*”, which the school has a serious chance of achieving.
- This year signifies the launch of a 3-year cooperative effort together with 3 other prominently environmental schools in England, Norway and Spain, conducted within the framework of the Comenius I program. The school hopes that this teacher-exchange program will allow colleagues involved to gain experience with cross-curricular systems abroad to the mutual benefit of all.
- In the area of assessment, the school would like to develop a more effective methodology as well as to increase the level of professional assistance.
- The world is constantly changing, but the school cannot ignore the principles of sustainability; values allowing the next generation to view the universe surrounding them as a “*whole entity*” have to be created and preserved.

Bonhoeffer College, Kuipersdijk (the Netherlands): Dutch East Indian Company – core skills

1 School context

The Bonhoeffer College in Kuipersdijk is a pre-vocational secondary education school ("voorbereidend middelbaar beroepsonderwijs"). 611 pupils in the age range of 12 - 17 are enrolled. This case study is restricted to the group aged 12 – 13 years.

The school in this case study can best be described as a traditional school, using traditional teaching methods. The school offers pre-vocational education including a stream that focuses on the provision of extra support for the weaker learners. The school has a relatively large influx of students from economically disadvantaged backgrounds, many of whom have a problematic home situation. There is a rather high percentage (approximately 33%) of students from minority ethnic groups in the Bonhoeffer College. The school is situated in a middle-sized city (170,000) with an industrial history.

The case study concerns a month-long project that is run annually in the first year of the school. The pupils are 12 – 13 years of age.

2 What are the objectives and how are they implemented?

The cross-curricular themes that were implemented include:

- 1 An educational content: *the Dutch East Indian Company (1602-1800)* as a topic that integrates history and geography and encompasses a number of other subjects as well (Dutch, technology, mathematics, health studies), thus creating a concentration of time and staff devoted to the project.
- 2 A set of *core skills*: working together; gathering, processing and presenting information.
- 3 A *new didactic approach* that emphasises a more authentic, holistic approach to the topic, uses learning by experiencing and learning by doing, and stimulates pupils by fitting the content of the project into a game.

In this case study the educational support institute SLO co-created a new learning content as well as a new approach to learning and teaching for and with the school staff. The benefits for SLO were: gaining experience with school-based curriculum development and producing a piloted teaching package. The benefits for the school were: combining professional development of teachers and managers and creating a tailor-made teaching package.

Therefore the creation of the project had a set of goals in itself, apart from the educational objectives already mentioned.

The goals of the project were:

- gaining experience by organising teachers of one age group into one team and using this team to develop innovative programs and teaching methods;
- providing teachers with positive experiences with different teaching methods;
- exploring the qualities of this specific group of (under achieving) pupils;
- offering a new teaching programme in a more stimulating fashion;
- searching for new ways of organising the content of education in a thematic (subject-integrated) approach instead of through a set of subjects;
- exploring the benefits of close cooperation between curriculum experts and teaching staff.

3 Implementation strategies

The implementation process was at the heart of this project from the perspective of SLO (see the 6 aims listed above). A number of innovation strategies that are regularly referred to by researchers were put into practice in this innovation project. They are the focus of 3.1. In 3.2. the school perspective is a more central issue.

3.1 Common vision and organisational structures

Getting the teachers involved

A lot of educational innovation emphasises new structures or formal conditions and standards. Little or no attention is paid to changing the perspectives of the teachers. According to Fullan (Fullan 2001) successful innovations pay attention to the three main dimensions of innovations for teachers, simultaneously.

These are:

- the use of new learning and teaching support materials;
- handling a new teacher-role as well as a new balance between teacher and pupils' roles.
- a change in convictions and visions on teaching and learning.

All three levels are interrelated and must be included in the implementation strategy. The way in which materials are designed and the transparency of aims and contents each has an influence on the teachers' perception of the innovation. Ways to include teachers in the different curriculum development phases ("enactment") lead to a stronger sense of responsibility for the innovation and attune it with the teachers' abilities and possibilities. Thus a sense of ownership of the innovation is developed within the process. The teachers at the Bonhoeffer College met on a weekly basis. Once every two weeks they worked on the curriculum with the support of SLO staff.

Process approach

Innovations can best be described as processes, rather than as products. Eventually a change of convictions is a personal process that takes place within a social context. Therefore it is recommended that innovations are introduced to a group of teachers, preferable a team, as this case study shows.

Some principles/advice (adopted from Fullan, 2001):

- reflect on learning experiences within a team;
- teamwork can lead to cooperation and support;
- training must not be isolated from practice, but should rather be integrated into practical work;
- visible effects and positive experiences form a strong stimulus to continue: the effort pays off.

The team at the Bonhoeffer College consisted of 8 teachers all teaching the same 3 classes that participated in the project. The team met on a weekly basis already. Because of the project these meetings were now used to talk about education rather than organisational matters and problematic pupils. In the meetings relevant content was discussed as well as didactic working methods and class management.

3.2 School curriculum

The school managed to allocate time to the teachers to work on curriculum development and to organise team meetings.

When the project was carried out, the pupils only experienced lessons relating to the VOC (Dutch East Indian Company) project. In Geography and History the lessons continued regardless of the teacher or subject on the timetable. The content was organised around a voyage from 17th century Holland to present-day Jakarta. Four phases are distinguished: life in 17th century Holland, the voyage, encounters with a new culture and the relation between history and the present day.

Pupils make the imaginary voyage on an old VOC ship. To get a better understanding of life aboard, pupils visit a replica in the port of Lelystad at the beginning of the project. Working groups form the crew of the ship. As a team they make the voyage to present day Jakarta. Along the way different subject content and skills are offered. Ships can race each other and earn letters in different subjects that form the password to enter the final harbour.

The other subjects follow the sequence of the voyage but focus on a content related to the subject. For example, measuring distance on a map in mathematics, writing a ship's journal in Dutch, comparing eating habits and ways of preserving food in health education and building a scale model in wood/crafts.

3.3 Monitoring and evaluation

Pupils' progress is monitored through the "ships' journals". The project ended with presentations to other classes and parents. Different products were shown.

The University of Twente monitored the implementation process. A report was written identifying strengths and weaknesses.

4 Problems and solutions

Developing a school-specific curriculum takes time from teachers and curriculum advisers. This is a relatively expensive working method that could probably only be realised with government support. In other cases existing materials need to be used and adapted, or teachers must put in more development time. Once the project is developed, the investment pays off in the years to come.

5 Next steps

The Bonhoeffer College has five locations. Two other locations are now using the package. On one location a new project is being developed by the team without external support.

Literature

(Bakker, M. en Jeroen Bron (2002). *Projectmatig werken in kernteams. Een ontwikkeltraject in text en beeld (cd-rom)*. SLO, Enschede

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Slash (/) 21, Lichtenvoorde (the Netherlands): using ICT as a cross curricular: web quests in foreign language education

1 School context

In the rural town of Lichtenvoorde a new innovative school for secondary education was established in the year 2002: Slash (/) 21. The school offers education on a level that suits the majority of pupils: both pre-vocational (offering general subjects added with vocational subjects) as well as general secondary (offering general, mostly theoretical subjects). The school role was 150 for the first year. Every year 150 students will be added (now 300), bringing the total school role eventually to about 600. Pupils enrolled are 12-13 years old but the age range will eventually cover the 12-17 age group.

2 What are the objectives and how are they implemented?

The philosophy of the school was “invented” by a small group of educational advisers and managers. They wanted to put their ideas into practice by establishing a new school, in a new building with a selected team of teachers. The innovations proposed are presented as an answer to some of the problems facing Dutch secondary education:

- Fragmentation and curriculum overload: too many subjects, too many small (1-hour) subjects, too many (lesson) starting points during the day, fragmented presentation of reality.
- Pupils’ and teachers’ lack of inspiration and enthusiasm: too much routine work, textbook-led contents, passive teaching and learning methods, teaching for the average pupil in large homogeneous classes.

Some of the characteristics of the school are:

- Intensification: 3 main “subject areas” are offered: modern foreign languages, science and humanities. Each subject area is taught for 4 half days per week during 4 weeks.
- Subject integration. Humanities include elements of geography, history, health, life orientation. Science includes biology, chemistry, natural sciences, and technology. Dutch, mathematics and arts are integrated into humanities and science.
- Change of perspective: the subject content is based on 12 key concepts such as power, energy, primary needs, and communication. These key concepts were the starting points of mind maps that provided the further details on the curriculum.
- No classes. Students are organised in basic groups of 24, but work mostly in 3 or 6-somes. Learning activities take place in an open space with ICT islands, working corners, round tables and instruction areas.
- Learning support materials. No traditional school books are used. Most materials are specially designed by SLO (Dutch educational support institute) and are offered through a computer network. Educational content is as ‘authentic’ as possible. Information is offered in different forms: texts, images, video, websites and out of school experiences.
- Problem oriented education. Much of the content is offered as problem oriented education, leaving a lot of freedom to the pupils as to the what, how and whom.
- A new role for teachers. Teachers are called tutors, they don't teach a class as a subject specialist, but assist pupils in their learning process. Two tutors assist a group of 50 pupils. One coordinates and often is an expert in the learning area. In addition, once every two weeks, pupil and tutor have a meeting to reflect on the functioning of the pupil in the school as well as on the learning results. New goals for development are set or monitored.

This case study focuses on *the use of ICT in the school /21, in particular in the Modern Foreign Languages*. Up until 2002 ‘informatica’ (computer skills) was offered as a subject in the Dutch national curriculum. ICT-skills are now offered as a cross-curricular theme. At least this is the intention, but it's not a reality in the majority of the schools yet. To assist schools with designing a sys-

tematic approach to the integration of ICT standards, SLO has designed a structure of learning, practising and using ICT throughout the curriculum. For each subject suggestions are made about how to integrate ICT. This has resulted in a scheme that can be found on SLO's website at <http://ict.slo.nl/>. (The Dutch version of the scheme is added as an attachment). The first objective therefore is:

- how this scheme can be put into practice.

Other objectives in this case study are related to the specific philosophy of the school:

- how to make best use of 4 mornings per week devoted to the learning of modern foreign languages (four weeks in a row);
- how to offer assignments and materials that are 'workable' for different types of pupils in a class or group;
- how to create an inspiring learning and teaching method as well as realistic, meaningful content.

3 Implementation strategies

3.1 Common vision and organisational structures

Current organisational structures include:

- a native speaker functioning as a mentor/teacher;
- extended time periods;
- state of the art computer equipment;
- self-guiding ICT-based learning materials organised as "webquests";
- the integration of language theory (grammar, tenses, etc) with a realistic context and content.

3.2 School curriculum

ICT skills are integrated into the total curriculum. In the case of English as a modern foreign language, the whole subject content of English is integrated into 12 web quests. The titles of the 12 web quests are: who are you?; school; what does the UK look like?; food; holidays; film and music; foreigners; cross the border; friends; care; languages and professions; languages as an instrument for...

English is offered 4 mornings per week during 12 weeks in the first year.

3.3 Monitoring and evaluation

Formative evaluation is carried out to improve the web quests for the near future. A helpdesk at SLO is available for pupils and staff.

4 Problems and solutions

Even though the integration of ICT in subjects like modern foreign languages can be regarded as a success, some problems have emerged.

The first problem signalled by the tutors/teachers is the over-use of the computer. Pupils were almost glued to their monitors, and if an answer could not be found through the Google search engine, that meant the answer did not exist. As a result some materials are now offered in print instead of through the computer network and more attention is being paid to group work and forms of interaction.

A second problem is that of maintenance of language skills. Once the intensive program of 12 weekly times of 4 mornings is over, formally (according to the national curriculum guidelines) no English needs to be offered in the remaining weeks of the first two years of secondary education. However, foreign language knowledge and skills, need to be maintained. As a solution, elements of

English (as well as the other languages offered) are integrated into the science and humanities programs.

A last problem concerns the continuation into upper secondary education. Tutors play an important role in determining the level of upper secondary education that is suitable for the pupil. This proved to be a difficult task. With regard to the programme offered in upper secondary, a new balance needs to be established between preparation for the national subject exams and the broader learning areas used by the school.

5 Next steps

The programme is revised for the second year of first graders entering the school. Pupils' progress will be monitored during their further years of secondary education.

At the moment, the programme for upper secondary education is being designed.

The school offering the programme was rewarded in 2003 with the language education award. This award is initiated in 1998 by the European Commission to promote the learning of the major European languages. Information in Dutch can be obtained at: <http://www.talenprijns.com/index.html>.

For more information on ICT in the Modern foreign language studies:

<http://ict.slo.nl/integratie/matrix.html>

Chapter 3 Analysis

This third section summarises and describes the analysis made of the project's ten case studies. Observations are structured around the following issues:

- development of vision;
- implementation;
- features of the school curriculum;
- monitoring and evaluation.

References to case studies are made according to the following order:

- 1 St. Gertrudisinstituut, Landen (Flemish Community of Belgium): social skills.
- 2 Koninklijk Atheneum Middenschool I, Genk (Flemish Community of Belgium): learning to learn.
- 3 Cyfarthfa High School, Merthyr Tydfil (Wales): work-related education.
- 4 Pontarddulais Comprehensive School, Swansea (Wales): personal and social education (PSE).
- 5 Writhlington School (England): Orchidaceae, a cross-curricular project spanning science and business study.
- 6 Loreto Grammar School (England): citizenship as a cross-curricular theme.
- 7 The Alternative Secondary School for Economics (AKG), Budapest (Hungary): social studies.
- 8 Remetekertvárosi Általános Iskola, Budapest (Hungary): environmental education.
- 9 Bonhoeffer College, Kuipersdijk (the Netherlands): Dutch East Indian Company – core skills.
- 10 Slash (/) 21, Lichtenvoorde (the Netherlands): using ICT as a cross curricular: web quests in foreign language education.

1 Development of vision

1.1 Structural basis

In the case studies several elements which led schools to establish a common vision are described. Some of these 'triggers' are to be found within the school itself. Others are due to external factors.

In the first category there are schools in which the common vision is based on a consensus on the importance of the cross-curricular theme (1,2,8) or on the fact that the cross-curricular theme lies at the heart of the school's pedagogical vision and identity (7). A 'weaker' variation of this consensus is found in schools in which the vision is stipulated in a school's policy statement or mission statement where it is intended to be progressively recognised by every school member (3,4,6). A third type of trigger, resulting in a common vision on cross-curricular themes, is observed in schools applying school based curriculum development (7,8,9,10).

In the second category there are two external reasons for schools to develop a common vision: results of inspectorate audits focusing on the implementation of the curriculum (1) and the requirement for schools to be in line with the national curriculum framework (1,2,3,4,6,7). Often, the compulsory curriculum requirements are incorporated in the school development plans and the teachers' year plans, the combination of which results in a common vision.

Not all schools work with a common vision (6) but rather with the cooperation of key players in the cross-curricular partnerships. This cooperation strengthens the vision between the departments involved but has a limited effect on developing a common vision at school level.

1.2 Breadth of the vision

Having a common vision is one thing. The way it is shared, accepted and applied by all those involved is another important factor determining the successful implementation of the cross-curricular objectives involved. The following features were found in the case studies:

- the vision is related to all actors within the school and to all pupil groups (7);
- the school's vision for total integration of academic and affective curricula in all aspects of school life is shared by all teachers (4);
- the CCT educational programme is accepted by school, staff, pupils, parents (4);
- there is support for staff to contribute to a whole school CCT mapping process (6);
- attention to CCT determines all activities and relationships (1).

Key words seem to be: wide acceptance of the common vision determining the staff's approach and behaviour.

1.3 Translation of the vision

One step further towards implementation of the curriculum are strategies aimed at giving the common vision a place in the schools' policy. These strategies can be a kind of overarching construction: schools call this an 'integrated approach' (2), a 'whole school approach reached by means of a mapping process' (6) or 'clearly delineated school policies' (4). Other schools aim at innovation through cross-curricular work: 'school based curriculum development results in a piloted teaching package' (9), 'new learning content and teaching approach' (9) is developed. Another category of schools focuses on the teachers' role: 'every single teacher is responsible for CCT' (2), 'job descriptions make clear that staff have a responsibility for both academic and personal development of pupils' (4) and 'cross-curricular partnerships are supported by the head and there is a culture of teaching a range of subjects amongst teaching staff' (5).

1.4 Problems

Various problems relating to establishing a common vision were mentioned:

- working groups on pedagogical items don't have enough continuity in their work (1);
- the commonality of vision is not shared by all staff (6);
- there is a range of viewpoints among the staff team (6);
- it takes a lot of time and energy to introduce new teachers to the school's vision and approaches (1);

2 Implementation

2.1 Structural basis

Several methods and structural organisation formats seem to be effective in order to implement cross-curricular themes. These aspects can be grouped in three categories: support, in-service training and the schools' general organisational structure.

Support

Support comes in different forms. First of all, in all case studies the head and/or the senior management team play an important role, both in facilitating and supporting the implementation of the cross-curricular theme (for instance contributing to a whole school mapping process) and/or in introducing and coaching new teachers. Furthermore, there are several ways of mutual staff support: regular area and subject meetings to review and evaluate the programme (4), involving teachers from different curriculum areas and other forms of teamwork. There is also support from outside: one school mentions a cross-curricular partnership between science and business studies with

global links (5). Another is part of a network with other schools mutually sharing expertise (1). One specific form of support from outside is that of the Dutch educational support institute (SLO) which was engaged in a project of school based curriculum development (9).

In-service training

Two obvious patterns of in-service training occur. The first one is training provided by external agencies (1,2,3,4,5,8). The second form is organised by and within the school itself (1,2,4,5,6,7,8,9,10). The latter can be training by teachers who followed external in-service training and disseminate the acquired competencies among colleagues or through periodic subject or team sessions. One school mentions whole school in-service training on teaching and learning strategies and specific aspects of the affective curriculum (4).

Organisational structure

The ways schools organise themselves in order to implement the cross-curricular themes are rather varied. All schools have some sort of time-tabled lessons or activities. For example, one school (7) uses 'epochs': the subjects periodically appear in blocks for the different grades in various forms. The same school uses 'theme weeks' to deal with a particular theme over an extended period of time. And maybe the most specific organisational feature of this school is its structure of 'micro-schools': each grade consists of 60 students and 6 educators who remain as one unit for the 6-year training course. Another school applies subject integration in the form of 12 weekly sessions of four mornings according to 12 'web quests' (10).

More generally, one school speaks about the flexible organisation of classes in order to meet the needs of pupils and subjects (4). There is also a school which organises an alternative curriculum for disaffected pupils (3). For another school, developing mechanisms to sustain a greater involvement of the student voice is important (6).

Different ways of structural connections in and outside school are used as well. In one school (5), there is a link with the arts department. The same school establishes global links with organisations and external partnerships with business advisers and organisations.

2.2 Problems

Implementation problems in relation to cross-curricular themes occur in different categories: general problems and problems relating to students, teachers and co-ordinators.

General

First there are a number of problems predominantly due to *external* factors. Pressure on the curriculum due to an overload of subject curricula and due to the inflexibility of time tables is a complicating factor that leads to a lack of time for cross-curricular work (1,2,3,4,7,8). As a result, in some cases particular aspects of the curriculum are not adequately dealt with or time is lacking to provide better support for pupils who need it the most.

Other schools experience a lack of infrastructure and space which inhibits the teaching of a wider range of practical subjects and the application of different and more flexible pupil groupings and teaching approaches (2,3).

Another complicating factor is the emphasis on knowledge teaching in order to successfully meet final exams and university entrance requirements (7).

A few other problems mentioned are due to factors *internal to the school*. Communication of the cross-curricular aspects in the school sometimes fails (5,7).

Furthermore, continuity of cross-curricular work (both in terms of content and organisation, e.g. the micro-schools) in different stages and sectors within the same school sometimes is problematic (2,7).

Teachers

A number of teacher-related problems point to their attitude towards cross-curricular themes: there is difference in commitment of teachers (2), some teachers fail to see the necessity of the CCT and see the CCT approach as an extra burden (2) and some are reluctant to move away from a subject approach (2,3).

Other problems relate to teacher training: it prepares future teachers insufficiently to work on CCTs (2), it is not attuned to innovations in education (2), adequate teacher training in the area of alternative pedagogy is lacking (7), which means teachers gain experience by trial and error. Furthermore, teachers do not always consider themselves sufficiently competent in teaching CCT skills (1).

The flow of information and co-operation between teachers can be improved (2).

In addition, teachers complain about paper work for CCTs on top of a heavy work load (1,2) and find that applying a student-centred approach requires time and energy (2).

Students

A concern *from* the students is that reflections on achievements were just written down in a folder, and not developed (6).

Concerns *about* the students:

- the process needs to move out and embrace the students' voice (6);
- mentoring structures between peer groups and different year groups brought up possible problems and questions such as 'can an 18 year old say what an 11 year old needs?' (6);
- breadth of the curriculum and manageability for lower ability pupils (3);
- students face dilemmas in terms of how to regard their participation and the interaction it requires (7);
- accepting a teacher as a partner is a delicate process (7);
- students tend to view discussion as a form of leisure (7);
- students are bored when they have to do the same kind of activities all the time (2,8).

Co-ordinator

Often, cross-curricular work is co-ordinated at school level. The staff responsible for this work face particular problems as well:

- the co-ordinator has concerns that the process depends on him and a few key people (6);
- there is lack of time to co-ordinate, plan and build strategies (1);
- co-ordinators maintain a teaching commitment so that development is done in their own time (3);
- there is lack of time to include CCT elements in teaching materials (8);
- the question arises: 'who is responsible for which activity?' (8)

3 Features of the school curriculum

3.1 Content and organisation of the curriculum

This section explores in more depth the content and organisation of the curriculum and the link between both. Especially when more than one subject is involved, there is a need for a different curriculum organisation. Although there is a lot of variety between the case studies, a common concern is the compatibility with the standards set by the national (core) curriculum. Besides complying with the compulsory core curriculum, most schools develop:

- a school development plan, which contains the objectives and the school's approach;
- teachers' year plans in which they take note of the subject and cross-subject objectives to be worked on.

A number of curriculum models occur across the different case studies.

3.1.1 Cross-curricular theme with subject satellites

In this model, a cross-curricular theme is used as a starting point. Subjects contribute to the cross-curricular theme but are not the basic starting point. An additional feature is that the cross-curricular theme is used to link up two or more subjects. In one school (9) an educational historical content, '*the Dutch East Indian Company (1602 - 1800)*' was used as a theme across different subjects. The aim is to develop a set of core skills such as working together and gathering, processing and presenting information. The cross-curricular theme plays a central role in various subjects. They were offered in an interdisciplinary way by combining subjects: geography, history and moral education. In addition, a set of other subjects was attuned to these integrated subjects. This was the case with Dutch, technology, mathematics and health studies. The cross-curricular approach is being realized by offering the content in a project structure around a story/game-line.

Another school (5) started '*The orchid project*' which spans the subjects of science and business studies.

A specific subcategory is one in which subjects are linked through the use of *ICT*. This model uses a cross-curricular tool or cross-curricular method rather than it implements a cross-curricular theme.

This model was found in one school (10) in which curriculum designers make suggestions on how to integrate *ICT* with attainment targets for each subject. The timetable and class organisation are adapted to this goal: there are no classes, students are organised in basic groups of 24 but they work mostly in groups of 3 or 6. For example *modern foreign languages education* is provided during 12 weeks of four mornings each, using the web quests methodology.

3.1.2 Integration model

Here, the cross-curricular theme is integrated in (nearly all) subjects and/or in several aspects of school life.

The citizenship theme is being applied throughout aspects of the school (6). The student voice is embedded in a whole school approach. Pupils are supported to take part in departmental, governing and pastoral meetings. The school builds in real life experience by a radical alternation of their management culture. The aim is to develop a student-centred participation in the governing and pastoral structures of the school.

Several examples of a whole school approach can be found in the case studies on *learning to learn* (2) and *social skills* (1). These cross-curricular themes are considered to have such a wide range that they do not belong to the content of one or more subjects. Thus each subject makes an effort to attend to the way pupils learn and help them acquire learning competences and social skills.

Teachers see subject related objectives as a tool to work on social skills objectives, for instance by means of using interactive and cooperative learning and teaching approaches.

Concerning *social skills*, some schools take another step forward by using these objectives as a curriculum behind daily activities. Social skills are dealt with in all activities and interaction. An example of this in a particular school (1) is the participation of pupils in the school's policy. This starts with the way pupils come to proposals in the class group, how this is organised in the pupils' council, how it is communicated with teachers and head, how feedback about the decisions is given to the class groups, and so on. In all activities, social skills are paid attention to.

In another school (7) the system of 'patrons' who devote time to the students individually at least once a week, proved to be important for the mastering of social skills. The discussions touched so often upon social issues that this system became increasingly important in terms of *social studies* content. Concepts that appear in lower-intermediate social studies courses under the title 'Study of Co-existence' (community, social norms, ourselves and our environment, values, customs, appropriate behaviour, co-operation and competition, personal, legal and human rights etc.) already reflected the development of these skills. Some of these were contained in the original social studies curriculum.

Also in the case of *Environmental Education* one school (8) integrates the cross-curricular theme within the school culture by the creation of a cross-curricular programme and a cross-curricular lesson plan. The theme occurs in a spiral structure and reappears at a progressively higher level each year, organised in projects for each class level. Projects for each class level are centred around 4 main issues and take place outside of compulsory lessons in the curriculum, but are nevertheless integral parts of the cross-curricular system.

3.1.3 Combining subject/cross-curricular approach

In this model both a subject and a cross-curricular approach are applied for a well-defined set of objectives.

Social and Personal Education - Careers education. Even though Personal and Social Education can be regarded as a set of competencies that can be raised in all subjects, one sees that in certain schools it has become an independent subject (this is standard in all schools in England and Wales). But then, certain issues are specially attended to by a cross-curricular approach. Careers education for example as a part of Personal and Social Education - a subject of the curriculum - is also attended to through a range of other contexts (3). It shares concerns with many of the subjects of the traditional curriculum but is seen as a separate entity. The policy permeates the whole curriculum and at the same time a programme of careers education and guidance is time-tabled as part of the curriculum. The continuity and vertical cohesion is visible in the subjects handled in the diverse years: learning to assess ones own strengths and aptitudes and to make informed choices in the first year is followed by labour market information. The next year the pupils are prepared for making option choices. Preparation and review of work experience, followed by careers education and guidance including information about further and higher education, completes the guidance.

One can find a similar combination of subject/cross-curricular organisation of the curriculum in a school (4) that organises the curriculum of Personal and Social Education (PSE) in different ways. Job descriptions concerning the personnel make it clear that staff have a responsibility for both the academic and personal development of the pupils. There is a flexible organisation of classes and PSE groups. Although PSE lessons are timetabled during the two-week cycle, the PSE programme is also covered wherever possible through the subjects of the curriculum. All subject teachers identify opportunities within the schemes of work. The timetable also includes periods for meetings between individual pupils and their form tutor each term.

Citizenship. In terms of shaping the curriculum some departments of a school (6) took responsibility for organising cross-curricular activities, for example 'Water Week' which was led by the science department. Other departments such as geography had a more subject-based view of the cross-

curricular theme, for example the head of the geography department considered citizenship an *'important stem of geography'*.

3.1.4 Evolution into an independent subject

A fourth and last model deals with (parts of) the cross-curricular theme, during a certain period in time, dealt with as a separate subject. Schools timetable, when possible, some cross-curricular themes as separate subjects because they are considered as very important, not because this is a standard or central requirement.

Learning to learn. For example in one case (2) there is the *extra course hour 'study guidance'* during four months in the first year of secondary education. In these hours, a number of competences are developed: how to plan school work, how to prepare for tests, how to make an assignment, how to fill out the school agenda, how to analyse information according to a certain method, and so on.

Social skills. In the first year of secondary education, one school (1) organises a special subject called *'social activities'*. This is taught by the form teachers. The subject content is partly based on the *'life keys'* approach. This is a course worked out by a private organisation. There is no separate subject in the second year due to lack of time in the timetable.

In both cases, this model is combined with the approach of the integration model (3.1.2).

3.2 Pedagogical approach

Cross-curricular themes bring along specific pedagogical approaches.

Learning and teaching strategies often include pair and group work, role-play and simulation activities in order to develop, among other things, oral, problem-solving and collaborative skills. Cross-curricular themes also seem to generate more collaborative and self-directed independent learning. In one school (7) lecturing by teachers is only one part of the lesson framework; students work through numerous topics individually or in groups. The teacher merely acts as a guide, organizing activities and providing assistance.

Real direct experience and an educational content as *'authentic'* as possible is the goal of many schools. For example, project methods defined by one of the schools (8) are based primarily on cooperative-interactive learning techniques, a unique study arrangement that always focuses on a real problem and a concrete task. By the time they complete the given project, working groups are expected to have created a material or intellectual product that examines the topic from the widest possible range of aspects. In this way, students are obviously *"forced"* to search for and discover connections.

Furthermore, extended projects, theme days or weeks, various school camps or open air classes, out of school visits, talks or sessions with experts from out of school, individual interviews, mock interviews, presentations, web quests and other activities focusing on a variety of topics or objectives are organised by the schools presenting the case studies.

4 Monitoring and evaluation

In most cases attention is given to aspects of both process evaluation and pupil assessment. A variety of actors is involved and a wide range of assessment and evaluation methods is used.

4.1 Evaluation of the process

Foci of the evaluation process are school activities, year plans and objectives, key skill reviews, training themes, compatibility between cross-curricular plan and pedagogical program and quality of fieldwork activities.

4.1.1 People involved in evaluation and assessment

A large range of people and institutions is involved in evaluation activities, a number of them *from outside school*. In two cases, schools are audited by the inspectorate of education (1,2). A university has been monitoring the implementation process and has written a report on the strengths and weaknesses for another school (9). Also the Dutch educational support institute (SLO) provided assistance (10).

Internal evaluation activities are coordinated by the headteacher (2,3), or a coordinator (4). Furthermore, several people are involved in internal evaluation activities: pupils themselves (1,3,4 and 8), teachers (1,2,3 and 4), head of the department (3,8), pastoral teams (4).

4.1.2 Evaluation methods used

A broad range of methods was used to evaluate the process and the output of the projects. Self-evaluation seems to be a very popular instrument. This is done by providing questionnaires to be filled out by staff and/or pupils involved in the project (3,8).

Other methods used were checking year plans (2), keeping note of teachers' objectives (2), lesson observations (2,3,4 and 8), scrutiny of pupils' work (4) and evaluation meetings (2,3).

4.2 Assessment of pupils

Some found it very difficult to measure the value added for the pupils (1).

Besides traditional assessment forms such as negotiating with parents, pupils and/or teachers (6), questionnaires to be filled out by pupils, standard of achievement examinations or GNVQ modular results (assessment after the completion of each module) (4,5), assessment of written work and skill tests (7) or debriefing activities with staff and teacher observation of pupils' behaviour (3), some other procedures were used: keeping diaries by pupils (3), personal portfolios (5,6) and 'ship's journals' (reports) (9). One school (10) applied formative assessment in order to improve the working material (web quests in this case) for the near future.

The focus of assessment could be the ability to reflect on the view of others, the involvement in extra-curricular events and the incidence of bullying or racism (4). In other circumstances the focus was on pupils' behaviour (attitudes, coursework) (3) or on pupils' personal development (7).

Sometimes ratings were given through subjects (1,3,4 and 5) or through so-called 'Pupil Progress Files' (3).

Chapter 4 Concluding observations

The project's ten case studies reveal a wide variety of approaches, contexts, policies and content. Given this variety and also given their limited and non representative character for the education systems involved, it is impossible to draw general, scientifically valid and reliable conclusions. It is, however, possible to make a few observations and to identify a few trends.

1 Problems and solutions

Probably the most obvious observation is that problems relating to the implementation of cross-curricular themes are 'European' or maybe even universal. The project's literature survey (see part 1), drawing upon the limited sources available on this topic, identifies a number of problems relating to different factors. A number of them are situated at the level of the teacher; others are located at school or pupil level. Also elements like curriculum overload and a lack of time and resources complicate the implementation of cross-curricular themes. The analysis of the project's case studies confirms the existence of these problems. Moreover, the case studies offer a more differentiated and context-related view on these implementation problems. They make it possible to look at how these problems occur within the context of actual schools and how they influence the way these schools deal with specific cross-curricular themes. They also highlight problems additional to the ones identified in the literature survey. For instance, it seems that vertical and horizontal continuity in the different stages and sectors within the same school can be problematic (e.g. in the Flemish schools). Another example, found for example in the Hungarian and Dutch schools is the pressure of final exams and university entrance requirements on the implementation of cross-curricular themes. Some of the case studies also pay particular attention to the role of one or more co-ordinators of the cross-curricular work at schools and the problems related to that function.

A mere confirmation or extension of problems in the area of cross-curricular work is interesting but not sufficient. The project team was also interested in finding out how schools, with significant experience and due motivation in implementing cross-curricular themes, deal with the problems they encounter. In other words, what solutions did schools devise?

Teacher involvement

In the often problematic area of teachers' involvement and motivation, schools seem to combine two different strategies. The first strategy is to create, probably over a period of years, a general atmosphere or ethos among staff that delivering a particular cross-curricular theme is simply a necessity. The theme gradually becomes part of the school culture, of the staff's way of thinking and acting. An example is the Welsh school (4) dealing with work-related education in which staff are confident and convinced of the value of this approach and cooperate fully with the delivery, monitoring and evaluation of the programme. It is seen to be of crucial importance in an area of high unemployment, where the local culture often does not encourage acquisition of the necessary skills and where stereotypical attitudes to employment still exist, particularly in relation to gender issues. A similar example is prevalent in the Flemish school (1) dealing with social skills. The starting position there is that 'if you take the position that you would like to do for every child at school what you would do for your own children, than social skills are automatically dealt with'. The school is also convinced that 'pupils cannot function well in class groups which are not functioning well'.

The second and apparently also successful strategy to get the teachers involved is to have them working together or communicating in such a way that the cross-curricular theme involved is also better implemented. A Welsh school (4) has good procedures for coordinating cross-curricular work and communication between the pastoral and academic elements of the curriculum is good. The Flemish school (1) made an inventory of what was already going on in the area of social skills, built upon that and worked its way up by means of meetings and individual discussions. Similarly, an English school (5) is aware of the fact that their mapping exercises 'need to be visited regularly' and that problems might otherwise occur, particularly as there was a wide range of views of the cross-curricular theme among both teachers and learners. In a Hungarian school (8) cooperation

was never a problem since all agreed to develop changes, and 'rationally planned teamwork' soon produced spectacular results.

Another Welsh school (3) has a more far-reaching policy: 'Such problems as a teacher's reluctance to move away from a subject based approach are not accepted in the school and staff are appointed with the understanding that they will show commitment to the school's approaches'. The same school allocates time for regular planning, discussion and coordination and makes good use of expertise and resources from outside agencies and personnel.

Finally a Dutch school (9) used the introduction of a cross-curricular theme in order to enhance teacher development. Teachers were given ownership of the programme by involving them in the educational and didactical design of the cross-curricular theme.

Pressure on the curriculum

One of the Welsh schools (3) still considers pressure on the curriculum as a problem but this is alleviated to some extent by the choice of a two-week timetable which allows for a degree of flexibility and breadth. Additionally, this pressure is relieved by taking whole days off-timetable for particular foci, and by spreading much of the factual content of the PSE-programme across subjects of the curriculum. In the Flemish school (1) dealing with learning to learn the head tries to solve curriculum overload by giving the teachers explicit autonomy to allocate time to issues other than pure subject content. The other Flemish school (2) organises a weekly course on social activities in the first year to release the curriculum pressure but fails to do so in the second year.

Pupils' involvement and motivation

In one Welsh school (3), the vast majority of the pupils respond positively to the school's approaches and is fully involved in the PSE programme. For a few, interest decreases as they move into years 10 and 11. The school is aware of this and works to address such lack of motivation by amending its programme and making it more interactive and relevant to pupils of this age and stage of development. A Hungarian school (8) also considers maintaining the students' interest as the greatest challenge as they quickly become bored if they always have to do the same kind of activities. This school aims at preventing this problem by more integrated planning and organisation. An English school (6) tries to involve more students by looking at mentoring between year groups. Another English school (5) is investing in a radical alteration of their management culture in seeking to support structural and ideological changes to 'embed student voice' into the heart of their practice. The implementation of the cross-curricular theme of 'citizenship' is a central part of these ongoing and proposed changes.

2 Assessment

Clearly, the least elaborated element of the cross-curricular process is pupil assessment. As the case study analysis illustrates, some of the schools involved developed techniques to monitor pupils' progress. For instance, an English school (5) has several monitoring and evaluation procedures common throughout the school. A Hungarian school (7) has a well-developed assessment and evaluation system, strongly focussed on the assessment of skills. Nevertheless, the project's schools generally think a lot of work remains to be done in this area. A few examples from the case studies to illustrate this point:

- In the area of assessment, one school would like to develop a more effective methodology as well as to increase the level of professional assistance.(8)
- A Welsh school (4) sees the development of valid and reliable pupil assessment as problematic and wants to work to provide a system for accreditation for work experience for part-time work undertaken by students.
- The other Welsh school (3) says it needs to improve the quality and continuity of teaching and learning and is currently focussing on pupils' different learning styles and on effective formative pupil assessment for learning. The same school plans the development of a de-

tailed system to track pupils' progress as they move through the school and to find ways to gain accreditation for pupils' achievements in key skills.

- An English teacher (6) felt that there still was a 'desperate need to track students to compare outcomes with expectations'.
- There is no systematic pupil evaluation in the Flemish school (2) dealing with learning to learn. In this school, teachers feel that those pupils receiving extra individual care gain most in terms of learning competences.

Considering the fact that the schools which have taken part in this project are not the least developed in cross-curricular work and assessment in their respective countries, the main observation here is that if monitoring pupils' progress is considered important, more and better instruments and methods need to be developed. This particularly goes for the evaluation of qualitative objectives. It is easier to assess the knowledge of facts than to evaluate behaviour. Still, cross-curricular themes very often deal with behavioural aspects. If these are to be perceived as equally important compared to other objectives, some kind of evaluation or monitoring will be required. If not, in the prevalent European secondary education school cultures, they will, by a lot of the staff and learners, remain being perceived as having a lower status, as being of lesser importance, than the 'hard' quantifiable objectives in the curriculum. And for schools without any form of monitoring or evaluation, it is very hard to see whether their efforts have any effect at all on their pupils.

3 Educational policy and cross-curricular themes

Education ministers or education policy-makers seem to be sending out mixed messages to their schools when it comes to cross-curricular work. Six out of the ten case studies in this project are schools in which the work in progress on the cross-curricular theme was carried out in order to be in line with the national curriculum framework. In other words, implementing these cross-curricular themes is compulsory (table 1 in part 1 of this report gives an overview of which cross-curricular themes are statutory in 27 European countries).

Education policy expects schools to deliver. But at the same time, schools do not always seem to receive the necessary support or are not always able to create the necessary conditions to do so effectively and efficiently. There are a number of facts in these case studies to support this observation. First of all, schools complain about an overload of subject curricula and an inflexibility of timetables. Other schools experience a lack of infrastructure, space and especially time. There is also the pressure of final exams and university entrance requirements. Schools also refer to teacher training which is said to prepare new teachers insufficiently for working with cross-curricular themes.

The general message here seems to be that if schools are put under pressure to meet compulsory cross-curricular requirements, support has to be given in order for schools to do their work.

4 Looking forward

In delivering this report, CIDREE has made its third contribution to the development of the thinking behind cross-curricular work. Considering the observations presented here and the current status of cross-curricular work, the project group identified 4 possible ways in which CIDREE or other bodies might take this work further.

- First, it might be considered appropriate to do more with the existing expertise on pupil assessment. Some schools do have well-developed methods and instruments. It might be worthwhile to study these and to try and spread them as examples of good practice so they are accessible to a wider audience. It might also be considered possible to develop, test and spread new material, especially focussing on the evaluation of objectives which are difficult to quantify.
- Secondly, the case studies on which the larger part of this report is built, were written by each school in communication with the CIDREE partner in the respective countries. This was done according to one and the same format which reflected the experience of the project

group on working with cross-curricular themes, supported by the literature survey. Subsequently an analysis was made of these ten case studies. It goes without saying that a deeper and closer look into schools working on cross-curricular themes would provide more detailed information and would reveal more of the mechanisms behind the facts. It would also be worthwhile to look into how schools evolve over a longer period of time and why. Therefore, a second proposal of the project group could be to conduct in-depth longitudinal studies.

- Thirdly, and maybe in combination with the previous suggestion, the possibility of engaging the project's schools into a Comenius project might be considered. CIDREE institutions could work more closely with these schools. The schools themselves could benefit, as some of them are already doing, from exchange of expertise with their colleagues from other countries. In this kind of project, the development of material that is of common interest to the different partners might be an option.
- The last proposal might also be a combination of one or more of the previous ones. CIDREE's and schools' expertise might be drawn upon and further developed with the aim of producing guidance material for schools and teachers. Having detected particular needs by its current and previous project on cross-curricular themes, and further building on that, CIDREE might this way, very concretely, contribute to improving the quality of cross-curricular work in schools.

In conclusion: these ideas provide some indications of possible future work. They could be developed and expanded if CIDREE or any other organisation were interested in taking them further.