

D2 School portrait De Duizendpootrakers Primary School, Opwijk

<http://schoolweb.rago.be/bs/opwijk/>

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1 General characteristics of the school

The school was founded in 1959 as Rijkslagereschool (State primary school) 't Kasteeltje. The school flourished and the number of pupils increased to 320. However, from 1986 onward the numbers began to decline and by 30/6/1999 the number of pupils had reached an all-time low of 58.

On 1 September 1999, a new concept was launched for the primary school: traditional education based on contract work⁷ with class instruction and with integrated 'hoekenwerking' (corner work) aimed at implementing the use of ICT. The working methods were partly based on techniques related to 'method teaching'. The concept was developed by the school itself, and includes elements of Jenaplan, Freinet, Steiner, Montessori and De Leefscholen. The number of pupils is now rising steadily (157 pupils on 25/11/2003).

The ICT project started on 1 September 1999. Each class group on nursery and primary levels was provided with one Pentium II machine. During the start-up, the school had shown itself to be very ICT-minded. The primary level was given an internet link, with particular emphasis on the communicative aspect. On 1 May 2000, a school website was launched. Each classroom was given its own web location on the website.

Again the school emphasized the communicative aspect. The use of ICT was made an obligatory component when the fortnightly contract work was being compiled, and its use was regularly evaluated within the team. Simple, cheap software was purchased so that the subject material could be practised.

As a result of this 'soft' introduction in the classroom, the teachers discovered the full potential of ICT and its use. This has since developed into intensive use, which means: daily communication by email by means of the classroom task 'collecting the email', search exercises using the search engines, maintaining and updating the class group's web location, supervised chatting between the different class groups... The school website is therefore a central point of focus for the use of ICT by the pupils, both at home and at school.

However, the high costs are a burden for a still relatively small primary school. The fixed costs for the internet link, the requisite licences (MS-KISS contract), printer cartridges and anti-virus programs together amount to around 1700 euros every year.

⁷ Contractwork: pupils work on assignments with end-dates that are agreed on by both teacher and pupil. A distinction is made between mandatory tasks and non-mandatory tasks.

Added to this are the occasional costs: replacement of the oldest PCs by more recent models or by depreciated machines from the business world. (The school tries to obtain the latter free of charge). Every year the school purchases two new machines with a maximum capacity. Actually, the school buys just the parts and the (technical) ICT co-ordinator assembles them. These machines are placed in the primary school's highest class groups. The old machines from those groups are passed on to the lower class groups. Before the computers have been completely written off, they are used in the pre-school and after-school care department (these machines have an internet connection but are very slow).

There are no direct hidden costs. The furniture consists of discarded tables that the school tries to get hold of wherever it can. The training of the teachers is their own initiative and at the personnel's own costs. People who have not followed any specific training courses are advised and assisted by their colleagues and currently, at their own request, by one of the ICT co-ordinators (the school has access to a technical and a pedagogical ICT co-ordinator from the school group⁸).

The aspects of communication and learning by exploring and working together are central themes in the school. The communicative aspect is mainly stimulated by the email traffic and to a limited extent by the use of chat rooms. The school also believes that it is very important that the pupils experience the disadvantages of ICT as a source of information. According to the Head Teacher, thanks to ICT the pupils can rediscover the value of books - that is, besides the advantages they also experience the limitations of ICT and the fact that it is sometimes easier to find information in a reference work in the school media library. As an instrument for practising and doing exercises on the subject material, ICT is used as much as possible so the traditional series of exercises can be presented in an attractive way. This year, the remedial aspect was added (it is now in the initial phase).

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There is a formal written ICT policy plan with 9/2003 as the end date. This policy plan was mainly hardware-based, and therefore technically oriented. Now the time has come to explore further and draw up a new policy plan that will mainly focus on the content-related aspects: further refining the current working method and the use of software with the educational learning packages.

The school team opted for class computers. The aim was to make the computer an instrument in the classroom that basically fulfilled the same role as the blackboard, chalk and ruler.

The following is a summary of the PCs at the school:

- Pre-school and after-school care department: 6 machines
- Nursery groups 1 through 3: each 1 machine
- Groups 1 and 2: each 2 machines
- Groups 3, 4, 5 and 6: each 3 machines

⁸ School group: an organisational form within public education in which the central governing body delegates tasks to a group of schools in the same region. Each group contains some 25 primary and secondary schools.

Every machine has an internet link except for those in the nursery classes. Every classroom has a printer. Financially, this was found to be a burden because the cartridges were very expensive. At the moment, there is a changeover under way to enable all classes to print through the central photocopier.

A network was to be installed in the primary level to facilitate the internet link. The classes were fully rearranged in such a way that it was possible for pupils to work in groups during the weeks of class instruction or during the weeks of contract work.

2 Changes for pupils

Due to the implementation of ICT in the classroom, the traditional system has of necessity been converted to a more alternative system in which class moments are regularly alternated with individual and/or group work. As a result of this, learning from each other and through each other has a huge impact, and this is increasing the intensity of learning. The pupils are more aware of the subject material and are more eager to learn. ICT was the driving force behind this turnaround in teaching methods but at present the ICT component is actually just one of many facets in the modernized learning process.

Due to ICT, the whole concept of the teaching function has evolved considerably. Although this is difficult to measure exactly, the Head Teacher believes that the children's level of maturity, the way they look at the world, their ability to put things into perspective and their reasoning power are very highly developed. The children are starting to use other strategies and other ways of thinking. Their feeling of responsibility in their own learning process is also much more developed.

The software that the pupils have been using in the classroom up until now has usually consisted of the cheaper programs, simple but attractive. The parents have also purchased the same programs for home use, because the children are not allowed to take the software home with them. In addition, the children unconsciously learn how to use the Microsoft Office package. Now that they are sending emails, they are paying more attention to spelling, although the same cannot be said for their chatting activities!

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The internet sites are usually offered through the school website or by the class teacher. Many of the pupils also bring the majority of the web addresses from home. (This is actually comparable to the more traditional activity of finding pictures at home and taking them to school.)

At present, the school is implementing the software for the new approach to arithmetic. This is mainly a remedial method and includes a student tracking system. It is being used to genuinely work individually on each student's level. All the information is stored on the class computer or on diskettes, where relevant.



At present, ICT is only being used to track the pupils' results in mathematics. The children view the computer as a very normal teaching instrument in the classroom. Due to its integration in the contract work and in the project work⁹ (WO), it is possible to work in limited groups with different lesson units and materials and therefore also with the computers. This also means that lesson times and lesson units are not as strictly defined as they used to be.

The children say that the quality of the software at home is usually a bit better. This is because they generally have the latest program releases at home. They are also not very happy with the hardware at school, and complain that everything is too slow. During the initial phase, the children were very enthusiastic, but now they consider the use of computers as a perfectly ordinary activity.

The parents (and the pupils) have made good use of the available options. The parents did not directly have a decision-making role to play in this, but they did make enthusiastic use of the school's facilities, mainly through the school website. As a result, most parents ended up buying a PC for home use. They send their own emails to the school and the school emails information to the pupils' homes.

The learning dimension inside and outside the school has really flourished and expanded. Due to internet use and the sensible and careful way pupils look for information using the search engines, the children are expanding their areas of interest spontaneously.

In a technical sense, there is also a lot of progress to be seen. For example, the majority of the pupils in the highest class groups are now able to create their own websites using child lines. The boundaries between learning at school and learning at home are becoming more and more blurred.

3 Changes for teachers

The teacher has been transformed into the class group's coach but also a co-learner. Instruction is no longer purely from above, although this aspect is still present.

The lesson plan of the old days, with its predefined content, has now been transformed into a lesson structure that mainly focuses on consciously dealing with the different work and group forms so that more objectives can be achieved in a more flexible way. The team is now more conscious of and more focused on the learning objectives.

The classes frequently use Microsoft Office and sites found using the search engine.

ICT is not used for testing pupils.

The use of ICT is regularly discussed during team meetings. The following agreements were developed on the basis of the experiences of the group:

⁹ Project work: learning strategy in which pupils independently and actively look for solutions for a problem (a theme) that has been narrowed down together with a teacher. This problem often has links to several subjects and provides opportunity for authentic learning.



- daily email from Group 2 upward
- mandatory use of ICT in the contract work
- free use through free 'hoekenwerk' (corner work)
- free use through project work
- alternative forms of exercise using software or Office.

The team formed itself, either through learning by means of self-discovery, or by following an evening course on their own initiative. Within the team, a strong team spirit has developed which, under the influence of three pioneers, has evolved into a kind of joint learning.

The team is positive in an integrated way about the use of ICT and about innovations in general. They list the main advantages as being the capacity for differentiation, communication and performing searches.

When selecting teachers, a knowledge of ICT is certainly not an absolute requirement, but a basic knowledge of ICT is always welcome. The main requirement when using ICT is to have a healthy and positive attitude to alternative ways of working and of managing classes.

4 Organisational change

The ICT philosophy was integrated into the modified school philosophy when the school was restarted (see above).

The school still works with the year-based class system. The changes are mainly in the area of class organization and structure. The changes in class arrangements are particularly interesting. Up until now, the Management was the driving force behind the ICT initiatives. Due to the flexible use of ICT co-ordinators in the school group, these co-ordinators are taking over the Head Teacher's work more and more. Management of the hardware is in the hands of the technical ICT co-ordinator. Now, by filling in an application form on the website, the teachers can report drawbacks or specify things they need. People can also report didactic problems to the pedagogical ICT co-ordinator.

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The basic programs are managed through an MS-KISS contract. Other programs are provided by teachers, parents, program matrix...

The evaluation of ICT is a component of the evaluation procedure for the contract work and within the framework of communication, but it is not specifically referred to as ICT evaluation.

In the school group, an ICT policy cell was established, through which proposals are made and implemented. In this way, for example, an order voucher system was developed during one of the initial phases. At present, a full intranet is in operation

in which all documents, reports, etc. can be viewed electronically by all administrative personnel of the school group.

The non-teachers have also become involved in this new wave of modernization. It even resulted in many of them buying a machine for home use after they became aware of the possibilities and opportunities offered by ICT.

5 Changes in co-operation with the environment

Each group (classroom, parents' association, circle of friends, ...) is responsible for its own part of the school website. This website is the hub of all developments in the school, both within the team of teachers and for the co-operation with parents. Partly because of this, the bond and the interaction between parents and the school has become a lot stronger and more intense. Businesses (and parents) also contribute to the development of ICT by donating 'obsolete' hardware to the school.

The school hopes to receive more financial support for its ICT policy from the Government.

6 Reflection and ambitions

All of the parties involved are very happy with the approach to ICT and the way the use of ICT has evolved over the past years.

In the future, the school wants to focus more on the implementation of remedial software on the one hand and to reduce the difference in levels between the different group members on the other hand. Another priority is to make the school building more secure against burglars after recent break-ins and thefts.

Partly thanks to the politics of selection when filling job vacancies, the modernized pedagogical-didactic switchover has gone quite smoothly. The main bottlenecks were and still are in the area of finance. The school expects that, due to a lack of funds, its hardware and software will very soon become hopelessly antiquated and that it may soon not be able to afford the annual purchase of two new machines. Peripheral equipment: a digital camera is definitely not one of the financial options. At present, the digital cameras being used are private property.

7 Appreciation

- With very scanty financial resources, the school has built and developed a coherent ICT policy.
- The school has always based its development of ICT on a didactic philosophy and has put this philosophy into practice in a systematic way.

- The team is constantly formulating new objectives and trying to achieve them slowly but surely, step by step.

8 *Lessons for others*

- Do not focus solely on the ICT aspect; it makes more sense to focus on the wider picture. Evaluate the complete educational concept and dare to take on the challenge; there may be disappointments at the start but when you get over them they will only make you stronger in the long run.
- Provide the necessary help when transforming teachers into coaches – that is, give the teachers the time and space they need to go somewhere for teaching practice
- Leave things to develop naturally and do not force the issue.
- Local, provincial and national government must continue to provide financial aid for hardware.
- Once PCs have been purchased, they must be used; otherwise it is a waste of money that could have been spent on something else.