



# DIL Assist

## Concept and Overview

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ImagineCup

## Problem

Thanks to information technology, the world is changing... and even so is education, the use of a computer gives us a valuable tool in our learning process.

But a computer is still a complex machine, not only for children, but also for teacher and even for parents...some call this the “digital gap”.

So, the problem we have thought about is how to teach a young student, a child from 6 years, to use and work with a computer the right way.

In our opinion, we would integrate the computer in the learning process for all parties, even the parents, and step away from the current situation that “working on the computer” is seen as a separated topic in the learning process.

## Solution

We came up with the idea to create a **digital learning platform for 6- to 12-year old children**. Our believe is that there are no good solutions for this age group, compared to solutions for college institutions.

What we want to improve with our platform, for all parties.

- ✓ A digital agenda.
- ✓ Better communication between student, teacher and parents.
- ✓ Allowing better tracking of students.
- ✓ ...

What will the program improve for the teachers.

- ✓ Easier to watch the student points.
- ✓ Students class lists.
- ✓ Less paper work.
- ✓ ...

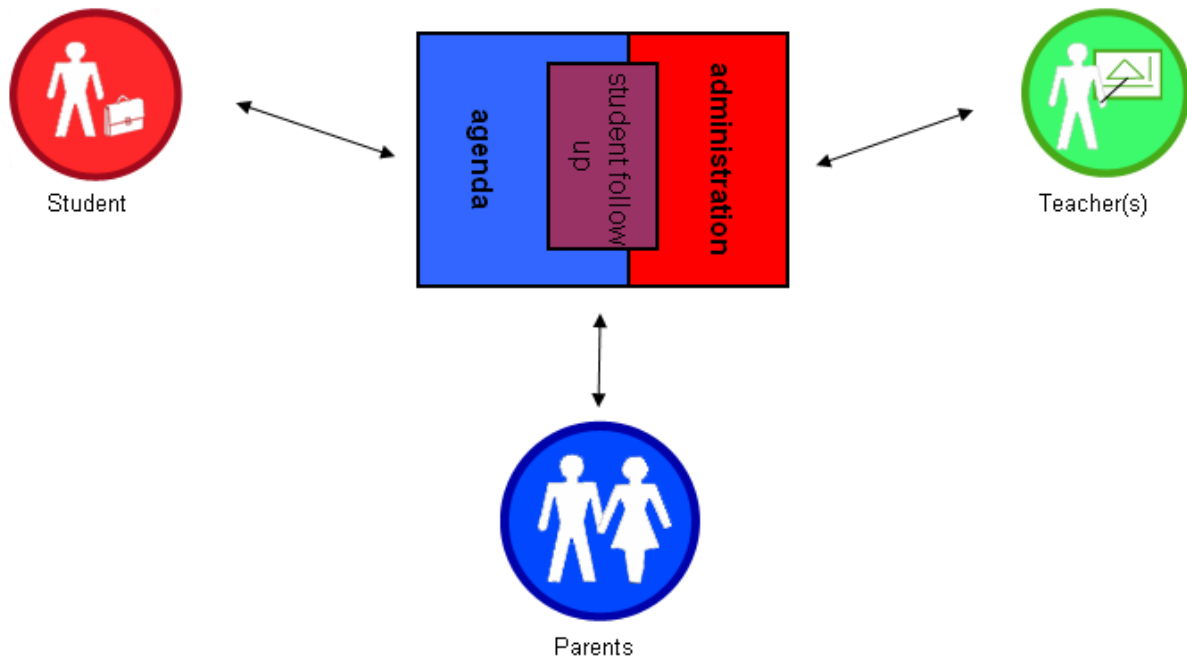
What will the program improve for students.

- ✓ They can find their homework and make it.
- ✓ They will know what to learn.
- ✓ ...

What will the program improve for the parents.

- ✓ Can see that the kids made their homework.
- ✓ Easy to communicate with the teacher.
- ✓ ...

The **figure** below gives an overall view of the new learning platform :



## Why

In our vision, every course will make use of the digital learning platform so that it is no longer viewed as a separate course, but more as a means of learning, just like reading or writing. This creates a process called “long life learning”, allowing children to learn the digital world more day by day.

The teacher on the other hand loses a lot of time in administrative tasks, so by adding a lot of the needed administration in the platform, there does not have to be extra separate work to be done. This frees up the available time of the teacher, and allows him to spend the extra time for his students.

The learning platform also allows better communication between either teacher and student or teacher and parents. At this moment, the student is the communication link between teacher and parents, creating possible problems when students don't pass on the information. This is solved by direct communication through the platform.

When we view the whole platform, there is a substantial added value for teachers, students and parents.

Because of the short project time line, with a deadline of May 2007, we will not have enough time to complete the whole platform. We will instead create a prototype with a few working components as a proof-of-concept.

## Look and Feel

When using the digital learning platform, one must first log in to the system. Depending on the user type, the system will present one of three possible interfaces. Here we will give a short list of possibilities per user type:

1. Teacher
  - View and edit agenda
  - Add and review tasks

- View individual results per student, create automatic reports
  - Bookkeeping
  - Possibility to communicate with parents
2. Student
    - View agenda
    - Make tasks, view reviewed tasks
    - View results and reports
  3. Parents
    - View agenda
    - View results and reports
    - Communication with teachers

## How

More practically, the platform will be separated in two important parts: the first part is the agenda and the other part is the accompanying administration. The administration depends on local factors as well as what there is placed in the agenda. Because of this, the agenda will have to work independently of the administration part. Therefore we will **start** with the creation of the **digital agenda**.

We know that six year is a low age to start working with a computer. For this reason we have decided to **make an assistant**, he will help the children when they need it.

Example:

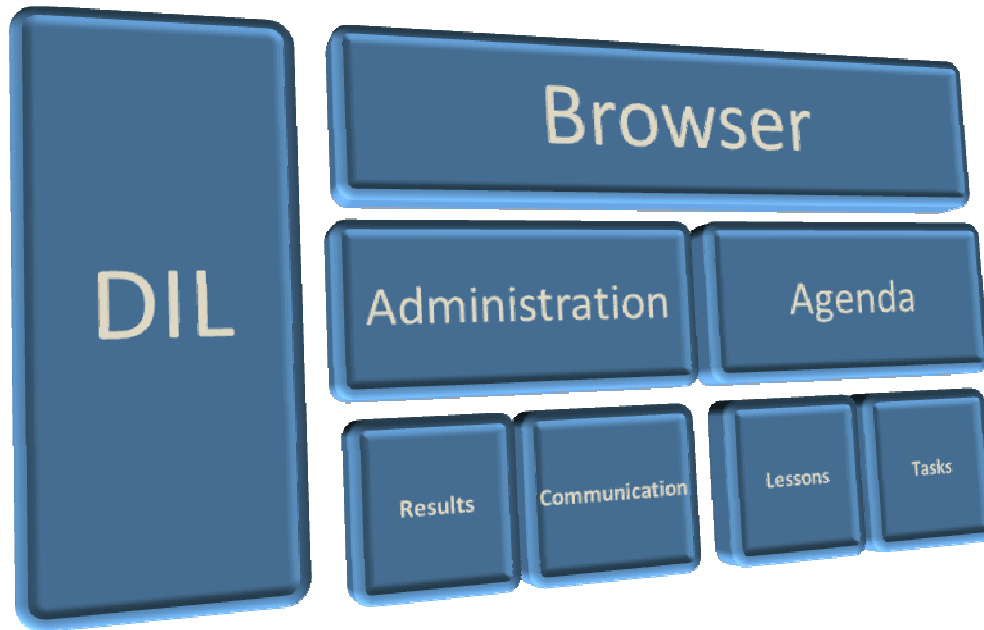
A child forgot how he need to do something, he can click on Dil (Digital Learning Assistant) and he will show up. He will ask what problem the child has and shows how to solve it.

This will make it easier for the child to work with the platform. We wanted to work out the example with Microsoft Expression Blend but the WPE platform is still in beta. That's why we have chosen to work with Adobe Flash.

## Architectural Overview

We have chosen to make an architecture in three levels. Because it's very easy to implement new things to it.

What you can see is that Dil (the assistant) is an application on its own and it will cover all our three levels.



## Team presentation

### The team

The team consists of three students, Anthony Castreuil, Tim Langens and Elio Struyf. We all study electronics-ICT at the University College of Applied Engineering of Antwerp.

### Anthony Castreuil



**Age:** 20

**Background:** Anthony has a broad interest in computer technologies.

**Why he joined:** He joined the Imagine Cup competition for the experience of creating an application from design to implementation in an international context.

## Tim Langens



**Age:** 22

**Background:** Tim is the oldest member of the team. In his spare time he works for a local youth movement Chiro.

**Why he joined:** He joined the Imagine Cup to learn more about the process that takes place when designing a program. He also likes the social theme and the international context of the competition.

## Elio Struyf



**Age:** 21

**Background:** Elio likes to go bicycling, he also likes to learn about new computer technology's and trying out the newest programs.

**Why he joined:** He joined because he liked the idea to participate in a competition of the biggest company from ICT in the world.