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Title: The HeadStart Maths Program: A Case Study
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Sandwell College is located in the Black Country close to Birmingham, and is spread over three campuses, West Bromwich, Oldbury and Smethwick. The area has a diverse and varied community made up of many different cultures and minority ethnic groups and this closely reflects our student base.

A lot of the students we receive for mathematics are from the secondary schools in the local catchment area and really should be at a higher level than they have achieved. One of the reasons for this is that maths is not a popular, exciting or interesting subject for many of the students. The problem for us is, how can we make the subject exciting, interesting and something the students want to do? With the growing popularity of ICT within the learning environment, we believed that some kind of online program might be the way forward.

After being given in-house demonstrations of three of the most popular online maths programs, the Maths team leader, his staff and some IT representatives all agreed that the HeadStart program was the most likely to suit the needs of the College and the students. HeadStart seemed better structured to the needs of our students, less "busy" in its presentation and simple to understand at the same time as being challenging to the more talented students. The Program is split into three main areas: Foundation Maths, GCSE Maths, The Teacher Program.

Most of the students involved with the HeadStart program have shown a positive reaction. This alternative way of learning seems to keep the students occupied and interested, while improving their mathematical abilities.

HeadStart can be formatted to the individual's needs, so a work plan can be devised to suit the weaknesses diagnosed by the students' screening results. The program gives the tutor the option to make only the work plan available to the student. This restricts the student to the work at hand, avoiding the temptation to browse the software and waste time.

The HeadStart Program.

The HeadStart program seems to be a very effective way for teachers to construct lessons and work plans suited to their students' needs, while educating and stimulating them.

I will give an overview of the GCSE Maths part of the program; it is very similar to the Foundation program and the Teacher program can control both.

1. The Syllabus Building is used to explain the subject and give examples and animations to help the students understand the subject.
2. The Tutorial Tower is where to find out how well you know the subject. It will also break down the questions and explain how to work out problems, and this works in conjunction with the syllabus building.
3. The Lab Dome is used to experiment, and tests your understanding of the subject.
4. Test Mountain is where you may set tests in order to see how well you are progressing.

When the student has completed practising on a subject, and are confident, they can go to the Test Mountain and set themselves a test on the subject they have just completed.

The syllabus sections are on five levels ranging from level 6, the lowest, to E2, the 'E' standing for exceptional. The Teacher program gives the tutor the right to allocate work plans to the students and remove access from the main program, thus making the student concentrate on the areas in which the tutor believes they need extra tuition.

Each work plan can contain as many parts of the syllabus, Tutorial Tower, Lab Dome and Test Mountain as the tutor deems fit. The software allows the student to be tracked and can process reports on single students, classes and subjects alike.

To get the students used to HeadStart they were allowed to explore and experiment with the program, with help and guidance available if needed. Once the students understood the concept of the program then, the maths staff could use HeadStart to its full potential. By using a basic screener to find the level of the students involved, the results gave an indication of the range of the work plans to assign to students.

Overview

The HeadStart teacher program is a most effective way of using an established computer network to construct lessons, teach, analyse student progress and perform administration tasks. Programs like HeadStart GCSE maths integrate seamlessly with the teacher program. Providing teachers with greater flexibility to create lessons to educate and stimulate their students while easing the management of administrative duties.

Results from a recent pilot scheme at the college showed a marked improvement in ability, attendance and behaviour. Tutors comments include, "the work plans take a while to set up, but are very useful to the students, they enjoy using this program and feel it has helped them" and "Head Start is useful in that individual students can pick up on their own work plan after any absence". During a six week pilot scheme run at Sandwell College, results were shown to be increased by 9% overall.

The group recommend that having an IT technician present during the initial stages would allow their team to concentrate on teaching the students while any minor software/hardware problems could be dealt with as they occurred. Working as a team also provided the group with valuable discussions about the work plans and any problems thrown up could be corrected. They also recommend that to enable the desired continuity and progression of the student, work plans will need to be available as soon as the student logs on again.

We have experienced some minor problems with the updating of the HeadStart database, due to server problems this has now been rectified. The latest version of Headstart is now online.

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