

## EDMONTON PUBLIC SCHOOLS

April 16, 2002

TO: Board of Trustees

FROM: A. McBeath, Superintendent of Schools

SUBJECT: WebCT

ORIGINATOR: G. Reynolds, Department Head

### RESOURCE

STAFF: Avi Habinski, Gary Herchek, Caroline Létourneau, Rob Martens, Darwin Martin, Brenda Mulder, Brian Mulder, Boris Oskin

### INFORMATION

Web Course Tools (WebCT) is an integrated set of computer tools designed for developing and delivering interactive courses. It is also used to supplement classroom instruction by providing access to information and communication via the Internet. WebCT provides educational resources that include quizzes, on-line discussion forums, curriculum support materials and fully developed on-line courses. This set of web tools was developed by Murray Goldberg a former Ross Sheppard student who is currently a professor of computer science at the University of British Columbia. The product is used by more than 2,200 educational institutions in over 80 countries. More than a thousand courses at the University of Alberta are using WebCT. The district has joined the Alberta Colleges and Technical Institutes Consortium (ACTIC) for the purpose of acquiring a license for use of the product in the district.

In addition to the acquisition of a district license, District Technology also hosts WebCT applications on a server, provides disk storage and offers technical support to teachers interested in using this technology. As of April 2002, 300 courses have been developed by 125 district teachers. The courses are housed on a district server and over 1000 students are registered users of the product. Currently, a number of district schools including Centre High, Harry Ainlay, Ross Sheppard and Britannia are using WebCT to supplement classroom instruction. Argyll Home Education Centre is using the product for the purpose of testing students on-line and Metro College is planning to offer their students complete courses on-line. Consulting Services is using WebCT as a vehicle for the delivery of teachers' professional development activities and to enable teachers to access learning resources. The use of WebCT by teachers from Centre High school and by Consulting Services will be demonstrated at the board meeting.

Last year Consulting Services piloted the development of two on-line professional development courses for teachers. The course entitled "Social Studies for Grades 7-12 Teachers" attracted 44 teachers and the other, "Best Practices On-line", had an enrolment of 6 teachers. The goals of the courses are to promote collaboration among teachers by providing an environment of shared resources and to offer professional development at flexible times. This year Consulting Services is piloting two new courses using WebCT – "Social Studies for K-6 Teachers" and "Exploring Blueprints On-line".

The district has converted the 30,000 curriculum related questions from the Alberta Learning test bank into a WebCT format and has made them available to schools. It is expected that in the coming year teachers who are using WebCT will contribute their exams to the inventory. As a result, the collection of tests is expected to grow and expand to include an increasing number of junior high schools. Attached are comments from teachers who are using WebCT in support of their instruction.

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APPENDIX I: Teacher Comments About WebCT

### Teacher Comments About WebCT

“The question banks are extremely useful in setting up quizzes and exams. Instead of teachers having to spend time typing questions, they can easily be chosen from the wide variety in the question banks. WebCT allows for quick, automatic marking, of multiple choice and T/F questions. Teachers can then use their time marking short answer, paragraph and essay type questions that are also available for the exams. There is a need for updated questions, old diploma type questions, as well as questions that will meet the needs of new curriculums coming out.”

*Rosemarie Koshman, Argyll Home Education Centre*

“The ability to create interactive quizzes using WebCT has made a positive impact on our teaching experience.

Students have been allowed to write their tests and get immediate feedback. They have also been allowed to rewrite different versions of the test, making the test a tool for feedback relaying their progress and diagnosing their weaknesses - all this can be done by the student, rather than teacher initiated. This is probably the most powerful tool we have had the pleasure to come across in our teaching career.

By harnessing the randomly selected, self-marking, multi-attempt capabilities of a WebCT quiz, we are able to offer students four attempts on their grade 9 LearnNet math/science unit tests. The test becomes part of the learning cycle when students are provided with score, solutions and learning links immediately following WebCT exam completion.

The WebCT quizzing tool has provided us with the:

- flexibility to accommodate home schooling families that preferred a different set of resources to meet Alberta Program of Studies expectations;
- resource to provide a non-threatening option to encourage reluctant learners to start working;
- time to provide additional phone, small group, and individual support;
- motivation to find and develop interactive internet components for students to access when they are viewing exams they have written.

It is very rewarding to view the test submissions and see students making use of the resource. Action research at Argyll indicates:

- test scores may increase considerably when students review between three or four test attempts;
- grade 9 Math/Science Provincial Achievement Test results increase when randomly selected, self-marking, multi-attempt tests are incorporated;
- percentage of home schooling students writing unit tests increases when randomly selected, self-marking, multi-attempt tests are incorporated;
- reluctant learners can be motivated to start working if the work that has not been completed can be evaluated by a single test rather than a myriad of assignments;
- students will review and rewrite exams if given the opportunity.”

*Written collectively by:*

*Jim Reed, Barry Straughan and Mark Sheridan, Argyll Home Education Centre*

“It is becoming more common for students to have relatively easy access to Internet connected computers outside of school. As a result the use of WebCT allows me to do several things. First, I have a community of students who have a means of communication with me and with each other. Second, I can post notes and events so students who miss class can keep up with what happened on certain days. (This essentially makes my job easier, which is a huge bonus). Third, I can set up quizzes on WebCT easily that I don’t have to physically mark and the students can get immediate feedback. Lastly, WebCT allows me to create a web-page environment with links and multi-media that my students can access.”

*Brian Mulder, Centre High*

“I find that it has provided a useful medium for engaging students, delivering “Mimio”<sup>1</sup> notes from white board and “Flash” animations, and creating accountability.

Using “Flash” I am able to create animations, which are visually engaging and useful for explaining difficult problems in chemistry. Instead of just keeping these "learning objects" on my local computer, I post them in WebCT where my students can interact with them from a home computer, or anywhere in the world. In a heavy course, there is often little time for students to study in class. By using WebCT it is possible to channel some of the interactivity into a student's home.

Using "Mimio" technology, I can capture all the hand-written notes given in class and publish them on WebCT. Having notes which they can access from home helps to relieve students of the in-class pressure felt when trying to take notes and pay attention to what is being taught.

Some people would say that making all of this information available in the home would discourage students from coming to class. This is not the case. Using WebCT I provide a one question in-class quiz each day. The quiz is set to take place during the first five minutes of class, and "times-out" after this time period as expired. This creates much needed accountability. Students must have completed their homework to understand the question, and students must show up for class on time to be allowed to write the quiz. WebCT will then mark the quiz, and send the result for the student and me to view.

The overall use of technology has provided many occasions, both in and outside of the classroom, to engage students and retain their interest in the course.”

<sup>1</sup>. “Mimio” – an electronic device capturing notes from the white board during the classes.

*Rob Martens, Centre High School*