

## EDMONTON PUBLIC SCHOOLS

May 21, 2002

TO: Board of Trustees

FROM: A. McBeath, Superintendent of Schools

SUBJECT: Technology Skills Project

ORIGINATOR: G. Reynolds, Department Head

RESOURCE

STAFF: Avi Habinski, Marion Hyde, Pete MacKay, Terry MacPherson, Darwin Martin

### INFORMATION

#### **Background**

The Technology Skills Project was designed to assist teachers in acquiring the skills necessary to use computer technology effectively. In May 2000, the district adopted a new administrative regulation, KA.AR District Technology Standards. Standard #2 states, "All teachers will have access to and use technology to enhance teaching, planning, assessing, reporting, and personal professional development."

More specifically, the Technology Skills Project was designed to address two specific challenges. First, the decision to move to a common progress report meant that by September 2002, all schools must use the district Student Information System (SIS) for progress reporting. Second, the new Information and Communication Technology (ICT) curriculum is to be implemented in all schools by September 2003. This new Program of Studies requires that all teachers incorporate technology across the curriculum.

Prior to the start of the project, schools were asked to identify which teachers would be participating. As part of the identification process, teachers and administrators were asked to provide a self-assessment of their current technology skills. Based upon this assessment, they were placed into cohort groups according to their skill level. Participants assessed at the lowest skill level were provided with access to more training than those at a higher skill level. School training plans included a combination of strategies, such as district workshops, school-based workshops, school-based mentorship, and self-study online materials.

The biggest challenge in constructing a professional development model to deliver training to 2226 teachers was the diverse range of technology skills. In developing the strategy, it was apparent from the skill surveys that a range of proficiency among teachers existed not only across the district but also within individual schools. Therefore, the project was designed to provide each school with a customized training plan based upon the needs of the teachers.

In addition to the workshops for teachers and administrators, a SIS coach was trained at each participating school. Using a school-based mentorship approach, whereby an expert is

trained at each school with the goal of providing guidance and assistance to peers, we were able to extend training beyond the scheduled sessions.

In order to meet the objective of providing resources to all schools, including those that did not participate in the project, the online tools of SmartNet and eTrain were developed. SmartNet is an online professional development tool designed to provide the user with the opportunity to assess their technology skills and build a customized training plan. eTrain is an interactive online tool that assists teachers to enhance their skills in the use of the Student Information System (SIS). The online resources will provide all district staff with technology support beyond June 2002.

## **Project Summary**

The Technology Skills Project provided professional development to 2226 teachers from 122 district schools. A total of 394 workshops were provided over the course of 18 months. The project was delivered in three phases:

### **1. Phase I:**

- a) Foundation training was provided to teachers and administrators in the areas of file management, word processing, email, graphics, presentation software and an introduction to the Student Information System (SIS). Participants received either three or five workshops, dependent upon their skill level. A total of 715 participants had access to 172 sessions delivered centrally at the Centre for Education.
- b) Administrator training consisted of workshops designed to assist with management of the Student Information System. A total of 235 administrators participated in 69 training sessions. Session topics included Reporting and Printing, Security Issues and Course Requests and Timetabling.
- c) Access to SIS coach training was provided to each participating school. The SIS coach is a specialist who acts as the first contact in troubleshooting problems at the school level. A total of 115 SIS coaches were trained in 27 sessions.

### **2. Phase II:** The second phase of the project provided ICT and SIS workshops to individual schools on professional development and early Thursday dismissal days. ICT sessions focused on planning for ICT implementation through building a scope and sequence document. Schools could choose from several SIS topics, including SIS progress reporting and comment bank. A total of 815 teachers at 43 schools received training in Phase II.

### **3. Phase III:** The last phase of the project allowed schools to customize their training plans to meet the needs of teachers who were new to the district in 2001/02 as well as supply teachers on temporary contracts. A total of 359 teachers participated in 39 sessions delivered centrally at the Centre for Education. Phase III SIS sessions covered a full range of topics, including the mark-book and IPP modules. ICT sessions were designed to assist teachers with the integration of technology through tools such as PowerPoint and Inspiration. In addition, over the next four months, workshops will be provided to teachers in the use of the new Individual Program Plan (IPP) template which is a part of SIS.

## **Project Evaluation**

Workshop evaluation was an integral part of all the project phases. Ongoing evaluation allowed the project team to make adjustments to the structure of workshops to better meet the needs of the participants. For example, during Phase I administrative training, workshop evaluations indicated that principals desired additional topics be covered. Subsequent workshops were re-structured successfully to provide more targeted training. Several instruments were used in the evaluation process:

- Exit surveys after each workshop
- Online surveys of participants upon completion of their training series
- Analysis of help desk calls and data related to new computer hardware purchases in the district.

Participants were asked to fill out exit surveys at the conclusion of each session. Exit surveys for foundation and ICT training rated 95% effective or very effective. Surveys were also conducted at the end of each of the SIS training sessions. The SIS training sessions were rated as 99% effective or very effective.

Online surveys, completed by principals at the end of the project, indicated a high level of satisfaction with the content and structure of the project (Appendix I). In particular, principals believe that the project was very successful in enhancing the skills of their teachers in order to deliver ICT outcomes, with 100% reporting that it was effective or very effective. Additionally, principals believe the centrally delivered PD model was successful in terms of cost and organization, with 97.5% responding it was effective or very effective. With respect to assisting their teachers create student progress reports in SIS, 94.9% responded it was effective or very effective.

Participating teachers were also asked to complete an online survey upon completion of their individual training plan (Appendix II). Teachers indicated that the project was very successful in assisting them to create progress reports in SIS (95.5% effective or very effective) and in enhancing their personal technology skills in order to deliver ICT outcomes (95.7% effective or very effective).

Data indicates there has been an increase in the access to and use of technology by teachers over the past 18 months. Indicators of increased access and use include:

- In September of 2000, 4105 teachers had email accounts. In May 2002, 4746 district teachers have email accounts, an increase of 14.0%.
- District schools purchased 3200 new computers in 2001. The district ratio of computers to teachers is now 1:1.
- In the past 18 months, 26 additional schools began to use SIS for progress reporting.
- Many schools began to implement the ICT program of studies.

Historically, an increase in access and use of technology has triggered an increase in the volume of calls to the 'Help Desk'. In the September – November 2000 period (prior to the project), help desk calls numbered 8120 with 3072 specific to SIS. However, in the September – November 2001 period, help desk calls declined to 7427 (down 9%) and calls specific to SIS dropped to 2532 (down 19%). It is our belief that the technology skills

acquired by teachers during the project was a contributing factor in the reduction in Help Desk calls.

### **Acknowledgements**

The Technology Skills Project was a collaborative effort between District Technology, Consulting Services and Information Technology Services (ITS). The following individuals contributed to the success of the project:

Avi Habinski, Managing Director, District Technology  
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Wendy Johnson, Training Coordinator, ITS

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**Administrators and SIS Coaches Survey**

**How effective was the Technology Skills Project in assisting teachers in your school to:**

- Use computer technology to create student progress reports
- Apply computer technology to new situations
- Decrease the number of computer technology problems they experience
- Enhance their personal technology skills in order to deliver ICT outcomes
- Access online tutorial help in the form of eTrain and SmartNet
- How effective was the centrally delivered PD model for your school (cost and organization)

**Rate the effectiveness of each of the following strategies:**

- Focus on a few skills with a clear purpose
- Hands-on workshops
- Half-day workshop format
- Series of workshops with the same instructor
- SIS coach as mentor at the school
- Release time during the day to attend
- Upgrading the skills of staff at lower levels and then continuing the training with the whole staff
- Focus on applying what they learn to new situations

**Teacher Survey**

**How effective was the Technology Skills Project in assisting you to:**

- Use computer technology to create student progress reports
- Apply computer technology to new situations
- Decrease the number of computer technology problems you experience
- Enhance your personal technology skills in order to deliver ICT outcomes
- Access online tutorial help in the form of eTrain and SmartNet
- How effective was the centrally delivered PD model for your school (cost and organization)

**Rate the effectiveness of each of the following strategies:**

- Focus on a few skills with a clear purpose
- Cohort groupings with others at the same skill level
- Half-day workshop format
- Release time during the day to attend
- SIS coach as mentor at the school
- Related workshops for school administrators
- Series of workshops with the same instructor