E D M O N T O N   P U B L I C   S C H O O L S

June 19, 2001

TO: Board of Trustees

FROM: E. Dosdall, Superintendent of Schools

SUBJECT: <u>Investigating the Total Cost of Technology in Schools</u>

ORIGINATOR: G. Reynolds, Department Head

RESOURCE
STAFF: Avi Habinski, Pat Redhead

INFORMATION

On September 26, 2000, trustees received an information report and presentation about a project that was being undertaken under contract with Alberta Learning to explore the cost of technology in schools. The project was completed in April and will be published by Alberta Learning within the near future. The title of the report is '*Investigating the Total Cost of Technology in Schools – How much is enough?*' The draft of the executive summary is included. (Appendix I)

Thirteen schools in seven school districts, including Edmonton Public Schools, participated in the case studies. (Appendix II) In Edmonton Public Schools, James Gibbons Elementary, Mary Butterworth Junior High and Ross Sheppard Senior High completed case studies.

The document provides strategies and instruments for calculating the cost of technology as well as the value that is derived from the investment. It provides 30 sample cost-saving strategies and describes how an understanding of the total cost of ownership (TCO) can be used to improve planning for technology. The steps in undertaking a TCO improvement project are described.

When published, this document will provide educational decision makers in Alberta, such as superintendents, school administrators, jurisdiction IT managers, and school board trustees, with the information and tools needed to understand, control, and plan for all of the costs related to computer technology in schools.

PR: AH: pr

APPENDIX I – Executive Summary (Draft)
APPENDIX II - Acknowledgements

EXECUTIVE SUMMARY (DRAFT)

Total cost of ownership (TCO) is an analysis of all of the costs of computer technology in a school in comparison to the value that is derived from the current investment. A TCO analysis also includes an assessment of strategies that can be implemented to reduce costs. The TCO model used in this document identifies six categories of costs: hardware, resources, infrastructure, technology support, professional development, and management and planning.

The first stage in an analysis of TCO in a school or jurisdiction is to measure all of the costs. The TCO instrument provided in this document has proven to be effective for this purpose as well as for planning a technology budget. Generalizations cannot be drawn from the data reported in the case studies, however. Schools cannot be compared without strict control of the variables.

Determining costs is just the first step in a cyclical and ongoing process of planning effectively for technology in schools. The school technology planning process should be based on continuous improvement of TCO, keeping the costs down while maintaining the value of technology to the school.

The second stage in a TCO analysis is to collect data about the value derived from the investment so that value can be compared to costs. Value is defined in terms of goals. The performance measure method of determining value consists of identifying measures based on the goals established by the school in its technology plan. A rating scale can also be used to compare the value of the technology investment in one school to an ideal or standard, or to compare value across schools based on a common set of indicators.

The third stage in a TCO analysis is to compare the school's decisions and practices to cost-saving strategies. Four general strategies can be used to minimize the cost of technology:

- Plan and manage.
- Reduce complexity.
- Increase reliability.
- Provide user support.

Understanding TCO is a step forward in the evolution of effective technology planning in schools and jurisdictions. It's about cost-effective ownership, not the total cost of ownership. A short-term TCO improvement project can be planned to reduce the costs of technology. Technology planning should also be infused into the three-year planning cycle of the school.

ACKNOWLEDGEMENTS