EDMONTON PUBLIC SCHOOLS

December 12, 2000

TO: Board of Trustees

FROM: E. Dosdall, Superintendent of Schools

SUBJECT: Curriculum Addition: Networking Technologies

ORIGINATOR: A. McBeath, Department Head

RESOURCE
STAFF: Stuart Wachowicz, Stephen Wright

RECOMMENDATION

> That the locally developed senior high courses Networking
> Technologies 25C/35C or 25N/35N for use in the District, be
> approved for submission to Alberta Learning.

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Alberta Learning currently offers numerous Career Technology Studies (CTS) strands, to assist students to develop an appreciation, knowledge and skills in a given area of modern technology. Due to the very rapid rate of change in technological development, particularly in the Information Processing strand, keeping the courses revised or "evergreened" has become increasingly challenging.

One example where present courses have been unable to keep up is in the area of computer networks. With the growth being experienced in this sector of the economy, major network companies such as CISCO, Nortel and 3-Com have demonstrated a need for educational systems to provide courses which reflect the needs of industry, as well as the needs of post-secondary institutions. Students are not graduating with the in-place knowledge and skills, to be trained by the post-secondary schools quickly enough to supply the growing labour demand in this area.

Companies such as Nortel and CISCO have approached schools, requesting that they offer programming that will prepare students for careers. A number of schools have responded by attempting to provide company specific training through groupings of CTS courses, which are not always a suitable match. Thus, courses need to be created to match the general needs of all industrial and post-secondary entities, without catering to one particular company.

Prior to commencing the development of the courses, discussions were held with a number of staff from Alberta Learning. One of the options we were encouraged to consider was the development of locally developed courses to expedite a solution to the problem of articulating CISCO and Nortel requirements to approved curriculum.

The locally developed courses Networking Technologies 25C/35C or 25N/35N are designed to provide generic training in many aspects of network management. They will meet the requirements of the respective syllabus of both Nortel and CISCO, and will provide the student

with credit toward the first semester of networking courses at NAIT. The curriculum does add some vendor specific outcomes to enable the instructor to accommodate the requirements of the selected teaching resources.

The curriculum can be very readily updated, as may be required due to changes in technology and techniques. The courses are designed as two five-credit courses which will provide for 250 hours of instruction. They do not follow the one-credit course format of Career Technology Studies (CTS). There are a number of reasons for this, which include the pressing need for a continuity of instruction that is difficult to attain in the CTS format. The five-credit course is the preferred model of delivery for all of the partners involved in the development of the curriculum, in order to allow the student to more effectively benefit from the intensity, depth and connectivity inherent within the courses.

The courses are identified as 25C/35C if CISCO resources are used, or 25N/35N if the instructor selects Nortel resources.

Pilot implementation can begin as early as February 2001, pending approval of the Board of Trustees and Alberta Learning. The district sites that have indicated an interest are Queen Elizabeth High School, Centre High and Continuing Education.

Specialized training to enable teachers to deliver the curriculum will be provided through NAIT.

In the course of the development of the program of studies for Networking Technologies, Edmonton Public Schools, NAIT, Nortel and CISCO collectively, in a very short time, agreed on a program that is mutually beneficial to all parties and especially to the students we serve. The Networking Technologies curriculum is an important step in building cooperation between secondary and post-secondary systems and industry, providing for a smooth transition for students moving to post-secondary training and the world of work.

Copies of the courses are available for viewing in the Trustees' Reading Room.

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