EDMONTON PUBLIC SCHOOLS

September 12, 2000
TO: Board of Trustees

FROM: E. Dosdall, Superintendent of Schools
SUBJECT: $\quad$ Response to Trustee Request for Information
ORIGINATOR: A. McBeath, Department Head
RESOURCE
STAFF: Stuart Wachowicz

## INFORMATION

REQUEST \# 225 (TRUSTEE HANSEN): PROVIDE THE FOLLOWING INFORMATION REGARDING JUNIOR HIGH MATHEMATICS TO BOARD:

1. WHAT ARE WE DOING WITH RESPECT TO THE PLACEMENT OF TEACHERS IN MATHEMATICS ASSIGNMENTS TO ENSURE CURRICULUM EXPERTISE?
2. WHAT ARE THE NUMBERS OF TEACHERS IN EACH JUNIOR HIGH SCHOOL WHO ARE TEACHING MATHEMATICS?
3. HOW ARE THEY TIMETABLED FOR SUCCESS?
4. ARE WE USING MID-TERM EXAMS AND WHAT OTHER MONITORING DEVICES ARE WE USING THROUGHOUT THE YEAR?
5. WHAT ARE WE DOING WITH RESPECT TO THE PLACEMENT OF TEACHERS IN MATH ASSIGNMENTS TO ENSURE CURRICULUM EXPERTISE?

Historically the number of classes needing mathematics instruction has exceeded the number of certified teachers available who have explicit formal training in mathematics. Administrators and the district's personnel department have striven to place as many teachers with formal math training as they were able, with principals then ensuring mathematically trained teachers so placed were strategically assigned where the needs were greatest.

Professional development through Consulting Services has also provided support and inservicing to assist teachers to be more aware of the curriculum requirements and effective techniques of instruction. Internally schools have also encouraged the sharing of expertise, experience and resources among staff to enhance overall performance.

At the present time the number of graduates coming from the Faculties of Education with substantial training in mathematics is very small, and is insufficient to meet the demand in the schools. Combined with a large number of experienced math teachers retiring, the difficulty of staffing math classes becomes more challenging.

As a part of the solution, the administration is exploring new administrative regulations which would require teachers presently teaching courses in mathematics to acquire, if they have not already done so, formal mathematics training. To facilitate such an eventuality, exploratory meetings with post-secondary institutions are being held to determine the possibilities of mathematics courses being offered in a manner which would be most convenient to teachers. Such a program would significantly enhance the level of mathematical knowledge of many of our staff, and create a positive impact on student achievement in that subject.

## 2. WHAT ARE THE NUMBERS OF TEACHERS IN EACH JUNIOR HIGH SCHOOL WHO ARE TEACHING MATHEMATICS?

This number may vary somewhat from year to year in any given school depending on enrolment, staffing and programming. Presently there are $\mathbf{2 5 6}$ teachers in math placements in junior high schools in the district.

## 3. HOW ARE THEY TIMETABLED FOR SUCCESS?

There is no one pattern used in preparing junior high timetables. A variety of models are used in the district. The choice to use a particular model may be a function of a number of things such as community needs, student population or demographics, the number of courses offered or administrator preference to name a few.

Data does not exist which would isolate a timetabling model and allow a co-relation to student success in mathematics. The practice of timetabling mathematics classes in the morning is however done at a large number of schools and reports indicate this has a positive impact on achievement.

The Superintendent has met in June with the elementary junior high and junior high school principals to reinforce the importance of the role timetabling plays in the achievement of our students.

## 4. ARE WE USING MID-TERM EXAMS AND WHAT OTHER MONITORING DEVICES ARE WE USING THROUGHOUT THE YEAR?

The use of mid-term examinations in junior high programs, while relatively common, is not a standard throughout the district. Schools do vary on this practice. Some schools use common unit tests or a common final exam, which can function as monitoring devices, and help teachers and administration detect areas where improvement needs to occur.

During the course of the year some schools are now employing "curriculum alignment" strategies to help measure how well teaching activities are aligned with the mandated curriculum, in terms of what is planned, what is taught and what and how things are being assessed. A few schools have indicated that this practice has resulted in improved student achievement. (S. Wachowicz, 429-8186)

