EDMONTON PUBLIC SCHOOLS

February 8, 2005

TO: Board of Trustees

FROM: A. McBeath, Superintendent of Schools

SUBJECT: Grandview Heights School – Focus on Higher Level Thinking Skills

ORIGINATOR: P. March, Principal, Grandview Heights

RESOURCE

STAFF: Wendy Wiznura

INFORMATION

Grandview Heights Elementary/Junior High School, located in southwest Edmonton, serves 292 students from grades one to nine. The majority of students come from outside the community boundary, attracted by the Academic Alternative Junior High Program, the small student population and the strong academic record of the school. The school has an enrolment cap of one classroom at each elementary grade and two classrooms at each junior high grade. Students wishing to enter the Academic Alternative Program at grade seven must meet entrance criteria.

The Academic Alternative Program was established in 1978 to accommodate parents who wished to have a junior high program that focused on academics. Curricular objectives are studied in a broader sense. To accommodate the program, more time is allocated to the core subjects than to complimentary courses. All students in this program take French as a Second Language as a core subject. Eligible students may also take a three year accelerated program in math and science.

Students at Grandview Heights continue to perform very well on district Higher Level of Achievement Tests, with over half the student population reading beyond grade level and nearly 70% of the students writing at a "Proficient" or "Excellent" level on these tests. On Provincial Achievement Tests, the level of excellence has historically stood around 60%.

In 2001, the staff began to investigate Bloom's Taxonomy (an organizer for categorizing levels of abstraction of questions) as a starting point for their Instructional Focus. After an initial analysis of student results, the focus was narrowed to the area of synthesis (questions that build a structure or pattern from diverse elements). Over the next two years, Grandview Heights ILT and staff worked with Elisabeth Thomsen, district consultant, on practices related to synthesis, especially in the areas of metacognition and graphic organizers.

In the fall of 2004, after an analysis of student results indicated student progress in the area of synthesis, staff felt it was time to expand the focus to read "At Grandview Heights students will grow in their ability to use Higher Order Thinking Skills to extend our students learning and help them become proficient in investigation, decision making and problem solving.

Work is continuing in the areas of metacognition and brain research. Our best practice of Graphic Organizers was retained, and we now have added the use of "Thinking Maps" and a new resource called "Write Traits" which helps students organize and clarify their thinking. District consultants have worked with staff over this past year, to monitor our progress and help teachers refine and extend their skill set in using these practices.

With the expansion of our focus statement and best practices, a new interim measure was required. A problem was presented to students and they were asked to write down what their thoughts were as they began to tackle the problem. In other words, "what do you think you need to do or know, in order to begin solving this problem?" Student responses were rated using a four point rubric scale which measures metacognition performance. Analysis of the December results from this new measure has provided staff with some interesting information. Most of our students scored at a level 2 (Apprentice). Results indicated that students found it harder to express their "thinking" in written form than by speaking. Many began trying to solve the problem or list the steps. Only a few wrote down how they might go about solving the problem why they would use a certain method of inquiry. Staff certainly noticed that the written responses on the interim measure did not reflect what they saw in the work of the students.

The most surprising responses came from our grade ones. Due to their limited writing skills, their responses on "thinking through the problem" were scribed. These turned out to be very insightful. We realize that when exposed to certain metacognitive practices, young minds can tackle quite sophisticated problems.

Prior to the next administration of the Interim Measure, staff will meet several times to discuss ways to improve responses we receive from students. Areas of consideration include activities we will do within classrooms and possible improvements to the questions that accompany the actual problem. However, staff remain committed to the notion that for bright learners, it is vital they know, understand and can articulate the importance of developing strong thinking skills. We want students to keep the confidence shown by our youngest students. They believe that if you don't give up, you can do anything. If we can capture and keep this spirit then we know we can achieve "Superb Results from all our Students".

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