

EDMONTON PUBLIC SCHOOLS

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TO: Board of Trustees

FROM: E. Schmidt, Acting Superintendent of Schools

SUBJECT: Crestwood School – Focus on Critical Thinking

ORIGINATOR: Lloyd Ungeran, Principal, Crestwood School

RESOURCE

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INFORMATION

Crestwood School, located in central south-west Edmonton, serves a student population of 411 students in Grades Kindergarten to grade nine. It is a junior high district site for Academic Alternative and Gifted and Talented students. The elementary grades provide regular programming for students living in the neighbourhood and, starting in grade four, offer French as a Second Language.

Identification of the instructional focus began in the spring of 2001. During that school year, teachers engaged in extensive discussion of achievement results data for the school. Based upon this analysis, higher order thinking skills were identified as being of most benefit to all the students. The following focus statement was developed during the 2001-2002 school year:

The Instructional Focus at Crestwood School is to enhance the critical thinking skills of all students as measured by School Developed Assessments and Provincial Achievement and Highest Level of Achievement tests.

Three needs immediately became apparent: To develop a clearer understanding of what it means to be a critical thinker; to develop strategies to improve students' ability to think critically; and to create an effective measure of student growth in the area of critical thinking. In collaborative teams, teachers identified best practices that they were already using and compared this with the research. As a result of these discussions it was determined that they should focus on asking better questions in a way that would increase student participation and accountability. Strategies such as "Think, Pair, Share", use of various graphic organizers and Bloom's Questioning Taxonomy (which incorporated a hierarchy for asking questions at higher levels) were used. Another strategy that staff is currently using is a model that incorporates the idea of planning lessons so that students begin with a critical thinking question, identify relevant background knowledge and use habits of mind such as persistence, listening, flexibility, striving for accuracy, etc. (Costa, 2000). Assessment for learning strategies are a key component to this lesson planning as students and teachers develop indicators and criteria for judgment when answering the critical question.

Staff worked collaboratively in developing an internal measure that would provide data on the progress students were making in the area of critical thinking and provide direction for new learning. This measure began as a Know, Want to Know, Learned (KWL) graphic organizer along with a performance rubric (scoring guide) designed to help staff assess the level and quality of questions that students were asking. While the information from this measure led to informative dialogue on student learning, the staff had questions about the validity and the consistency of the data it provided. Further disaggregating school data led to the decision to narrow the instructional focus on the critical thinking skill of analysis. This skill is strongly evident through all curriculum areas. A new internal measure was developed to provide specific information on students' ability to analyze. This measure is given three times per year to all students and the information from this measure is analyzed by staff after each administration.

External measures show that students have made achievement gains over the past three years. For grade 3 the standard of excellence on the provincial exams in Mathematics increased by 12.5% and Language Arts by 1.2%. For grade 6 the standard of excellence on the provincial achievement exams in Mathematics increased by 38.2 %, Language Arts by 11.4 %, Social Studies by 31.6 % and Science by 22.1 %. For grade 9 the standard of excellence in Language Arts increased by 2.0 %, Math by 5.3 % and Science by 3.4%. These gains can be attributed in large part to a learning environment focused on student success and staff development with specific attention to critical thinking.

Implementation of the critical thinking focus at Crestwood is built on a base of staff collaboration that is supported by AISI funding. Staff meet in collaborative teams, organized by division and departments, two times per month to review data and partake in professional development sessions that include looking at student work and teacher assignments. As well, the Instructional Leadership Team meets once per month to set direction for teacher learning and plan professional development activities. This team is currently implementing a peer-coaching model and will be instrumental in broadening this initiative to all staff. This year Crestwood is extending the idea of collaboration by working closely with two other schools that have a similar student clientele and instructional focus. This partnership is viewed as beneficial to the learning and achievement of staff and students in the three school communities.

The staff at Crestwood believes that their focused approach to teaching and learning has resulted in increased student achievement and is an affirmation of their continued efforts to obtain superb results from all students.

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