ONTARIO PUBLIC SCHOOL BOARDS' ASSOCIATION

Leading Education's Advocates

EFFECTIVE PRACTICES IN ELEMENTARY MATHEMATICS EDUCATION

School Board_____Renfrew County District School Board_____

Contact Person and Email Address_____Gayle Bishop bishopg@rcdsb.on.ca_____

Name of Program/Initiative/Strategy_____The role of assessment as learning, data literacy and reflection in enhancing teaching and learning in mathematics_____

Hyperlinks to Documents or Website(s) Describing this Program/Initiative/Strategy

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Description of Program/Initiative/Strategy

The focus is on exemplary mathematics practices that excite, engage and increase student confidence and achievement. In the brief description please provide answers to the following questions: Where the program/initiative/strategy is delivered (school/board locations)? Who is responsible for delivering and monitoring the program/initiative/strategy? Who is the target audience? Are there any community partnerships involved? Are there any staffing or budget implications? Are there any special resources required? What are your indicators of success, etc.?

- **This EOSDN inquiry has been based in five schools throughout our county over the past school year.**
- **Three facilitators from the system (Numeracy Facilitator, Student Work Study Teacher, K-8 Consultant) worked with small teams of teachers from each school.**
- **Experts in the field of both research and mathematics worked with the whole group.**
- **The work has a focus on the classroom and evidence is collected on a regular basis (annotated student work, Observation Checklist, anecdotal notes)**
- **In addition to classroom evidence, pre and post surveys, exit cards and anecdotal notes are collected from whole group meetings.**
- **The system personnel assisted the teachers in making claims based on their evidence and analyzed all collected evidence in order to inform next steps.**
- **Funding was provided by the Eastern Ontario Staff Development Network as part of a three year project (this is the third year of the project). The three facilitators supplemented funding for small group sessions using their individual budgets.**

- **Teachers received Marian Small's Proportional Reasoning resource at the beginning of the inquiry and later were able to select an additional math resource book that would be useful to them in their practice. Further professional development was provided by Marian Small who was invited to be the math expert for the inquiry.**
- **Indicators of success centred on teacher capacity in terms of assessment for and as learning, data literacy and reflective practice. Continuation of this inquiry is necessary to show consistent evidence of student achievement related to the inquiry focus.**
- **In-between sessions allowed for co-teaching opportunities in which teacher and facilitator had a focus on assessment, and how to use this ongoing assessment for instruction, throughout the lesson.**

What has been the impact on Student Learning?

- **Teachers selected two marker students from each class as a focus for observation and other evidence gathering. The group discussion following the classroom observation centred on these two students and how to use the evidence to plan future instruction. This discussion led to a wider appreciation of how the detailed information about two students could influence planning for the whole class (flexible groupings, content and concepts to be revisited, approach to planning).**
- **Several meetings were held over a period of a few months which gave an opportunity to revisit previous observations and report back on student learning. Teachers were able to hone their skills around responding to students and giving feedback in the moment.**
- **The precision has allowed for greater focus on how and what students are learning, which leads to more careful planning for all student needs. At this point in the project, limited evidence is available in terms of student achievement, however, evidence does show that teacher fluency has improved and this is enhancing the teaching and learning of mathematics.**
- **Technology is supporting teachers to revisit evidence and to collaborate with teachers and students in the planning of next steps (Book Creator, Explain Everything)**