

TDSB
TORONTO DISTRICT SCHOOL BOARD



***DIAGNOSTIC AND ONGOING
ASSESSMENT TEACHER RESOURCES***
GRADES 1 TO 3

PILOTS REPORT
SEPTEMBER 2010 TO JUNE 2011

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TDSB
TORONTO DISTRICT SCHOOL BOARD



DIAGNOSTIC AND ONGOING
ASSESSMENT TEACHER RESOURCES

GRADES 1 TO 3

PILOTS REPORT



THANK YOU

We are indebted to the dedication and expertise of the 37 teachers from the Toronto District School Board (TDSB) who piloted the first drafts of the *QUICKCHECK Math Diagnostic and Ongoing Assessment Resources*. Their feedback was essential to the development of these resources and has determined the final form for publication.

Kelly Dixon, Paul Knox
and the Publishers

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Why Assessment Resources? A rationale inspired by the *Growing Success: Assessment, Evaluation and Reporting in Ontario Schools* [...]*

In June 2010, at the request of the Math Leadership of the Toronto District School Board (TDSB), the *QUICKCHECK Math* team of B&B Publishing developed drafts of **Assessment Resources** for its series *QUICKCHECK Math*. Each **Assessment Resource** covered one of the five strands in the Ontario Curriculum, grades 1-3. The development of these assessment resources was also a direct response to the *Growing Success* document. These drafts have been piloted by 37 primary teachers in four schools in the TDSB; a report of the pilot feedback is presented in the following pages.

“The primary purpose of assessment is to improve student learning. Assessment for the purpose of improving student learning is seen as both ‘assessment *for* learning’ and ‘assessment *as* learning’.” (p.28*)

“Teachers use a variety of assessment strategies to elicit information about student learning. These strategies should be triangulated to include observation, student-teacher conversations, and student products. Teachers can gather information about learning by:

- Designing tasks that provide students with a variety of ways to demonstrate their learning;
- Observing students as they perform tasks;
- Posing questions to help students make their thinking explicit;

[...]

Teachers then use the information gathered to adjust instruction and provide feedback.” (p.34*)

“*Descriptive feedback* helps students learn by providing them with precise information about what they are doing well, what needs improvement, and what specific steps they can take to improve.

[...]

Multiple opportunities for feedback and follow-up are planned during instruction to allow for improvement in learning prior to assessment of learning (evaluation).” (p.34*)

* Excerpts from *Growing Success: Assessment, Evaluation and Reporting in Ontario Schools, First Edition Covering Grades 1-12, 2010*. Ontario Ministry of Education.





QUICKCHECK Math: TDSB PILOTS FINAL REPORT, JUNE, 2011

I. BACKGROUND

- Four pilot schools were introduced to *QUICKCHECK Math Assessment Teacher Resources* at orientation meetings in October and November 2010. Orientation meetings were conducted by Kelly Dixon and Paul Knox from *QUICKCHECK Math*. Each pilot school represented a different regional quadrant of the Toronto District School Board. Three of the pilot schools were dual track schools (English and French); two schools were JK-5, one school was JK-6, and one school was JK-8.
- The teachers of the four participating schools were given an initial pilot survey in December 2010 which consisted of a teacher profile and initial reaction rating the *QUICKCHECK Math Assessment Teacher Resources*. The initial survey was returned by 23 of 37 teachers: 18 of 23 teachers rated their initial reaction to *QUICKCHECK Math* as “favourable;” 5 of 23 provided no response.
- Pilot teachers were given two further opportunities to give more detailed feedback on the quality and usefulness of the *QUICKCHECK Math Assessment Teacher Resources* for both diagnostic and ongoing assessment, in March 2011 and June 2011. The resulting data is presented in the following sections.

II. TEACHER PROFILE

- Twenty of 37 (57%) teachers completed a detailed pilot survey: 10 French Immersion teachers and 10 English teachers.

Participating teachers by grade

Grade 1	Grade 1/2	Grade 2	Grade 2/3	Grade 3	Grade 3/4	Special Ed.- K-5 Resource (French)
7	3	2	2	3	2	1

Participating teachers by years of experience

0-5 years	6-9 years	10+ years
9	5	6



III. SUMMARY OF PILOTS SURVEY RESPONSES

A. General Information

Question 1: Which core published math program or resources are you currently using in your classroom?

- Seven of 20 teachers reported using a variety of published core Math resources. The remaining teachers reported using one core published resource.
- The published resources which were reported to be used most often: *Cheneliere/Math Makes Sense* (16) and *Nelson Math* (7). Supplementary resources that were also mentioned: *Jump Math*, *Math Quest*, *Quest 2000*, Van de Walle, the *Guides to Effective Instruction and Accent*.
- Teachers understood that *QUICKCHECK Math* is not a core program but reported that it works well with the core programs they are using. “It complements our existing program very well.”

Question 2: Which math strands have you covered since January?

Number Sense and Numeration	Measurement	Geometry and Spatial Sense	Patterning and Algebra	Data Management and Probability
19	16	13	8	11

- All teachers reported teaching two or more strands since January 2011.

Question 3: Which *QUICKCHECK Math Assessment Teacher Resources* have you used?

- Of the 20 teachers who completed this survey, 17 of 20 reported using multiple strands of the *QUICKCHECK Math Assessment Teacher Resources*. The other three teachers stated that they had not used the *QUICKCHECK Math Assessment Teacher Resources* component.
- Teachers reported using the *QUICKCHECK Math Assessment Teacher Resources* for the following strands: *Number Sense and Numeration*, 15; *Measurement*, 11; *Patterning and Algebra*, 5; *Geometry and Spatial Sense*, 2; *Data Management and Probability*, 1.
- Teachers reported using the *QUICKCHECK Math Assessment Teacher Resources* with 5-10 students on average.



B. QUICKCHECK Math Assessment Teacher Resources feedback

Question 1: How clear are the instructions on the “How to use the QUICKCHECK Math Assessment Teacher Resources” page?

- Nineteen of 20 teachers found the instructions for the *QUICKCHECK Math Assessment Teacher Resources* clear. The words most often used to describe the instructions were “clear,” “user-friendly” and “easy-to-use.” One teacher found the instructions “quite wordy.”

Question 2 a): How often did you use the QUICKCHECK Math Assessment Teacher Resources with your students for ongoing/diagnostic assessment? b): Approximately how many activities did you use overall?

- Teachers reported using the *QUICKCHECK Math Assessment Teacher Resources* anywhere from several times a week to as needed. They used between 25%-75% of the activities.
- Some teachers noted that, because they did not have enough student books for their whole class, it was hard to use the *QUICKCHECK Math Assessment Teacher Resources* regularly.

Question 3: Tell us about how you used the QUICKCHECK Math Assessment Teacher Resources for: a) diagnostic assessment, b) ongoing assessment.

- Teachers used the resources in a variety of ways according to their needs.
- Teachers used the *QUICKCHECK Math Assessment Teacher Resources* equally often for diagnostic and for ongoing assessment purposes.
- Some examples of usage reported by teachers for **diagnostic assessment** purposes:
 - “To check where students were at before beginning a new unit of study; to help guide my planning and instruction.”
 - “It helped identify common misconceptions and allowed me to correct them right away.”
 - “To identify prior knowledge.”
 - “In one-to-one in an interview prior to a unit.”
 - “I gave students an activity to see what they knew and what they were struggling with.”
 - “I used it with a student who is having difficulty initially.”



– Some examples of usage reported by the teachers for **ongoing assessment** purposes:

“I used it to check in with every student to monitor their understandings and progress.”

“To ask specific questions and log responses from students.”

“Check for [student] understanding to solve [tasks] independently [and] to track the success/needs.”

“To complement/evaluate learning achieved or not during my instruction.”

“As group work for oral math language.”

“To check skills and processes.”

Question 4: Within a single assessment activity, two or three different tasks/questions were provided; how many of the tasks/questions did you usually do?

– In all cases teachers, picked and chose the tasks/questions that suited their own purposes.

– Sample teacher responses:

“I liked having choice over what I could use.”

“I pick and choose the most challenging.”

“I used two of the tasks/questions for each activity.”

“At times I did not have to use all of them to get the information I was looking for.”

“As a result of time, we did not use all the questions even though they were all great questions.”

Question 5: Please rate the overall usefulness of the assessment activities in the *QUICKCHECK Math Assessment Teacher Resources* by checking the appropriate response:

Not at all useful: **Somewhat useful:** **Quite Useful:** **Extremely Useful:** **N/A**

a) For diagnostic assessment:

- Thirteen of 20 teachers rated the activities as “Quite useful” or “Extremely useful”; one teacher left this question blank; no teachers rated its use “Not at all useful.”
- Sample teacher responses:
 - “It provided me with a quick option for determining where they are starting from and what prior knowledge they are bringing.”
 - “Very easy to use, even if you are new to teaching.”
 - “Another way of assessing is always useful.”

b) For ongoing assessment:

- Thirteen of 20 teachers rated the activities as “Quite useful” or “Extremely useful.” Two teachers left this question blank; no teachers rated its use “Not at all useful.”
- Sample teacher responses:
 - “Very easy to use. Step-by-step with *What to Look Fors* make it very easy to use without doubting if you are being subjective.”
 - “It gave an idea of how they were doing, what they understood and what needed reviewing.”
 - “Some students are better showing/doing this way than a written task.”
 - “The tasks/questions were great, although it was time-consuming to meet with the students.”
- Teachers who commented that there were either not enough materials for their whole class or that the student observation sheets should be improved, rated the usefulness of the *QUICKCHECK Math Assessment Teacher Resources* for both purposes lower (i.e. “Somewhat useful”).

Question 6: The *What to Look For* section is designed to assist teachers in providing descriptive feedback to students and in report cards. Please rate its usefulness by checking the appropriate response:

Not at all useful: **Somewhat useful:** **Quite Useful:** **Extremely Useful:** **N/A**

– Ten of 18 teachers rated the *What to Look For* section as “Quite useful” or “Extremely useful;” one teacher left the question blank; no teachers rated this section as “Not at all useful.”

– Sample teacher responses:

“It’s always nice to have clearly-defined *What to Look Fors* and not ones we have written just on our own. I like the clarity that comes with reading other *What to Look For* sections.”

“Very clear and straightforward. Nice that it gave you the ideas to use - reduced teacher work.”

“I liked that there was a *What to Look For* section because it made it easy for me to connect what I was doing to specific expectations on the report card.”

“Keeps us focused on objectives and helps develop further growth in our students.”

“Excellent for next steps.”

“They provide good suggestions for feedback.”

“Expectations are clear and easy to follow.”

“Makes the teacher’s job easy.”

“I didn’t find myself referring to these often but they are good to have as support.”



Question 7 a): Did you use the Observation Sheets provided?

- Nine of 20 tried the observation sheets; 8 of 20 said that they have their own system for recording observations; 3 teachers left the question blank.
- Sample teacher responses:
 - “Provides a clear overview of student performance and made the teacher’s job easier.”
 - “Relevant to report card where we include Next Steps.”
 - “A good tool - valuable.”
 - “Nice layout.”
- Some teachers wanted a checklist so that they could have all their student observations in one place. Other teachers wanted more specific examples in the “Student Knows” section of the Student Observation Sheets and wanted the same examples used in the “Next Steps” section.
- A number of teachers felt that there were either too many sheets to complete or that there was not enough room to write on the observation sheets.

Question 7 b): If yes, rate their usefulness by checking the appropriate box.

Not at all useful: Somewhat useful: Quite Useful: Extremely Useful: N/A

- Twelve of 20 rated the Observation Sheets as “Quite useful or “Extremely useful”; 5 teachers left the question blank; no teacher rated the Observation Sheets as “Not at all useful.”

Question 8: How user-friendly did you find the layout and double column format of the pages in the *QUICKCHECK Math Assessment Teacher Resources*?

- Teachers were very positive about the format.
- Sample Teacher Responses:
 - “I liked that it provides the task and question and the look for.”
 - “Very user-friendly.”
 - “The layout was great. No problems at all.”
 - “Very user-friendly, easy to read and administer.”
 - “Simple. Easy to refer to and use.”



Question 9: Please rate the overall usefulness of the *QUICKCHECK Math Assessment Teacher Resources* for diagnostic and/or ongoing assessment in your math program by checking the appropriate response:

Not at all useful: Somewhat useful: Quite Useful: Extremely Useful: N/A

- Overall reaction was quite positive. The majority were enthusiastic.
- Fifteen of 20 teachers rated the overall usefulness of the *QUICKCHECK Math Assessment Teacher Resources* as “Quite useful” or “Extremely useful;” one teacher left this question blank; no teachers rated the overall usefulness as “Not at all useful.”
- Sample teacher responses:
 - “I think it’s a great tool and very useful and informative. It's easy to use/user-friendly. Reduces teacher work. Simplifies.”
 - “Overall I think it’s great - my students work well with it.”
 - “This [one] is very relevant, easy to use and administer.”
 - “I would really like the grade 3 resources so that I can do this in my math class.”
 - “It is very helpful for the French math language - vocabulary.”
 - “Addresses differentiated learning styles.”
 - “It was wonderful! Students have a different outlet in which to perform. As a teacher it was very easy to assess.”

Question 10: We would appreciate any further suggestions and comments you may have.

- Sample teacher responses for the *QUICKCHECK Math Assessment Teacher Resources*:
 - “Assessment was made easy—or rather easier. I enjoyed my interviews with my students while assessing using *QUICKCHECK Math*.”
 - “I have really enjoyed using *QUICKCHECK Math* with my students. I believe that it is an excellent tool and I back it 100%. Keep up the good work!”
 - “I like the program for ongoing assessment for weaker students so I can see where they have the most need or just where we need to concentrate.”
 - “Hands-on very useful for students. Perhaps assessments could be provided for the whole class as individual/small group assessments are challenging due to limited time.”
 - “Easy to use and administer.”
 - “I would like a class checklist.”



- Sample teacher responses for the *QUICKCHECK Math Hands-on Student Resources*:
 - “It has been a pleasure working with *QUICKCHECK Math*. Students learned a lot from all the great visual stimulations. They are engaged and eager to do more. I would suggest publishing Book #2 for each strand for those keeners to challenge their ability/skills.”
 - “Additional sets required.”
 - “Students love the program.”

IV. ADDITIONAL COMMENTS FROM PILOT TEACHERS:

- “It’s definitely a great assessment tool.”
- “It helped me make the link with proper questions and strategies. It’s great reinforcement for teachers.”
- “They follow my instructions and the assessment gave me a clear indication of the way they are thinking and what they do to measure time.”
- “Students worked in pairs so there was math dialogue/discussion without any teacher prompting.”
- “Feedback sheets with suggested questions are a great way of recording student thinking when problem-solving.”
- “It starts great conversations in math with kids. They are thinking and talking about math. I pulled observation sheets into interviews with parents.”

V. CONCLUSIONS

- Both the *QUICKCHECK Math Assessment Teacher Resources* and the *Student Hands-on Resources* were seen as a useful complement to existing classroom materials and received an overall very favourable response. Both English and French teachers were easily able to use the resources in ways that met their own particular assessment needs, using them equally for diagnostic and ongoing assessment purposes; students enjoyed the experience of using *QUICKCHECK Math Student Hands-on Resources*.



GROWING SUCCESS CONNECTIONS

“The primary purpose of assessment is to improve student learning. Assessment for the purpose of improving student learning is seen as both ‘assessment *for* learning’ and ‘assessment *as* learning’.” (p.28*)

- The data from the pilots show that teachers used the *QUICKCHECK Math Assessment Teacher Resources* for assessment *for* learning. The assessment tasks and questions were used for both diagnostic and ongoing purposes as a way of identifying where students were and checking with them to monitor student progress. Teachers also used the *QUICKCHECK Math Assessment Teacher Resources* for assessment *as* learning in an ongoing way to provide feedback to students and parents about understanding and progress and as a way of keeping focused on objectives to further growth in their students.

“Teachers use a variety of assessment strategies to elicit information about student learning.” (p. 34*)

- The data from the pilots show that *QUICKCHECK Math Assessment Teacher Resources* offer a variety of assessment tasks and questions. Teachers pick and choose the options that best suit their particular assessment needs. Assessment tasks/questions are open and differentiated, which allows for a range of student responses to assess learning.

“These strategies should be triangulated to include observation, student-teacher conversations, and student products.” (p.34*)

- The data indicates that *QUICKCHECK Math Assessment Teacher Resource* questions start great conversations in math. These conversations revealed student thinking.

“Teachers can gather information about learning by:

- Designing tasks that provide students with a variety of ways to demonstrate their learning;” (p.34*)

- The data shows that teachers found that the variety of assessment activities (tasks and questions) allows for a range of student responses and provided options for a variety of learning styles.

- “Observing students as they perform tasks;” (p.34*)

- As students performed the assessment tasks, teachers either used their own system for recording assessment observations or the observation sheets provided by *QUICKCHECK Math*. Teachers found the *What to Look Fors* helpful because they focused their observations on student strategies and next steps.



- “Posing questions to help students make their thinking explicit;” (p.34*)

Teachers liked the fact that each assessment activity provided questions, tasks and *What to Look Fors*. The questions in the Assessment Resource activities helped teachers make the connection between proper questions and eliciting student strategies.

“Teachers then use the information gathered to adjust instruction and provide feedback.” (p.34)

Teachers reported that *QUICKCHECK Math Assessment Teacher Resources* help them assess where their students were at and guided their planning and instruction.

“*Descriptive feedback* helps students learn by providing them with precise information about what they are doing well, what needs improvement, and what specific steps they can take to improve. [...]

Multiple opportunities for feedback and follow-up are planned during instruction to allow for improvement in learning prior to assessment of learning (evaluation).” (p.34*)

The data indicate that teachers used the *QUICKCHECK Math Assessment Teacher Resources* to check in with students at the beginning of a learning cycle and in an ongoing way throughout the cycle. Teachers found the *What to Look For* section in each assessment activity helpful as it made it easy for them to connect student performance to the specific expectations on the report card and gave them good suggestions for feedback.

* Excerpts from *Growing Success: Assessment, Evaluation and Reporting in Ontario Schools, First Edition Covering Grades 1-12 2010*. Ontario Ministry of Education.

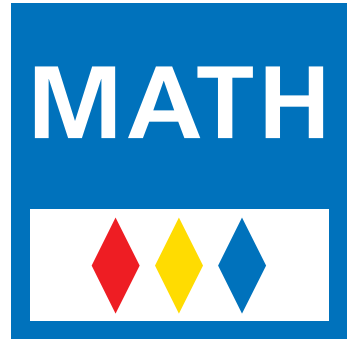


ADDENDUM

QUICKCHECK Math is published by



www.ebbp.ca 



NOVEMBER 2010
ASSESSMENT TEACHER RESOURCES PILOT QUESTIONNAIRE

NAME:

SCHOOL:

DATE:





GENERAL INFORMATION

1. For how many years have you been teaching?
2. a) What grade are you currently teaching?
- b) For how long have you been teaching this grade?
- c) What other grades have you taught? Please check all that are applicable.
 K 1 2 3 4 5 6 7 8 Other:
3. a) Is your degree in Mathematics? YES NO
- b) Have you taken any additional qualification courses in Math? YES NO
 If yes, which ones?

4. Are you currently teaching in:
 - a) a combined classroom? YES NO
 - b) French Immersion? YES NO
5. Which math curriculum strands have you covered since September?

6. Have you had a chance to use the *Quickcheck Math Assessment Teacher Resources* with any of your students?
 - NO Please explain why not:

 - YES If so, please provide a brief indication of your initial impression and then proceed to Part B or Part C of this questionnaire.
 Unfavourable Favourable
 Please explain:



6. Please explain:

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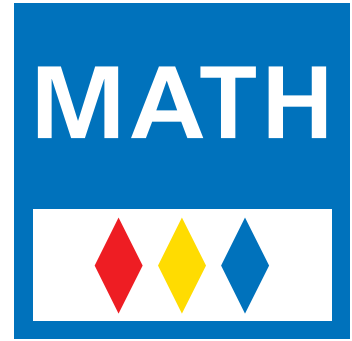
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**THANK YOU FOR YOUR TIME
AND THOUGHTFULNESS.**





**MARCH AND MAY 2011
ASSESSMENT TEACHER RESOURCES PILOT QUESTIONNAIRE**

NAME:

SCHOOL:

GRADE/S: **FRENCH IMMERSION:** YES NO

YEARS TEACHING:

DATE:

- A. GENERAL INFORMATION P.22**
- B. QUICKCHECK MATH Assessment Teacher Resources feedback P.23**



A. GENERAL INFORMATION

1. Which core published math program or resources are you currently using in your classroom?

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2. Which math strands have you covered since January?

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3. a) Which **Quickcheck Math Assessment Teacher Resources** have you used?
Check the appropriate boxes.

- Number Sense and Numeration
- Measurement
- Patterning and Algebra
- Geometry and Spatial Sense
- Data Management and Probability

b) With approximately how many students did you use each **Quickcheck Math Assessment Teacher Resources**?

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B. Quickcheck Math Assessment Teacher Resources feedback

1. With respect to the **Quickcheck Math Assessment Teacher Resources**, how clear are the instructions on the “How to Use Quickcheck Math Assessment Resources” page? Please explain and/or give suggestions.

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2. a) How often did you use the **Quickcheck Math Assessment Teacher Resources** with your students for diagnostic/ongoing assessment?

- Several times a week Once a week Once every two weeks Other:

Please explain:

.....

b) Approximately how many activities did you use overall? Please check the appropriate response.

- 0-25% 25%-50% 50%-75% 75%+

Please elaborate:

.....

3. Tell us about **how** you used the **Quickcheck Math Assessment Teacher Resources** for:

a) Diagnostic Assessment

b) Ongoing Assessment

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4. Within a single assessment activity, two or three different tasks/questions were provided; how many of the tasks/questions did you usually do?

- All of them Pick and choose

Comments:

.....

5. Please rate the overall usefulness of the assessment activities in the **Quickcheck Math Assessment Teacher Resources** by checking the appropriate response.

a) **For diagnostic assessment:**

- Not at all useful Somewhat useful Quite useful Extremely useful
 Not applicable

Comments:

.....

b) **For ongoing assessment:**

- Not at all useful Somewhat useful Quite useful Extremely useful
 Not applicable

Comments:

.....

6. The *What to Look For* sections are designed to assist teachers in providing descriptive feedback to students and in report cards. Please rate their usefulness.

- Not at all useful Somewhat useful Quite useful Extremely useful

Comments:

.....



7. Did you use the Observation Sheets provided? YES NO

If no, why not?

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If yes, please rate their usefulness by checking the appropriate response.

Not at all useful Somewhat useful Quite useful Extremely useful

Comments:

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8. How user-friendly did you find the layout and double column format of the pages in the **Quickcheck Math Assessment Teacher Resources**?

Please explain.

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9. Please rate the overall usefulness of the **Quickcheck Math Assessment Teacher Resources** for diagnostic and/or ongoing assessment in your math program by checking the appropriate response.

Not at all useful Somewhat useful Quite useful Extremely useful

Comments:

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REPORT SYNOPSIS

Summary of the results from pilots that were conducted with the participation of 37 teachers of four schools in the four regional quadrants of the Toronto District School Board (TDSB) from September 2010 to June 2011.