TOOLS OF THE MIND

K

What makes →Tools unique?

In order to learn in elementary school and be successful students, children must develop the ability to self-regulate. Self-regulation encompasses not only emotions, physical behavior and social interactions, but includes the ability to monitor and control cognitive processes such as attention.

It includes:

✦ *The ability to stay on task*
✦ *Ignore distractions*
✦ *Remember on purpose*
✦ *Hold two strategies in mind at the same time*
✦ *The development of self-discipline*
✦ *The motivation to succeed*

Even though children may know many facts, without self-regulation they will not learn new things efficiently and will have trouble with more-advanced content.

In school, children need to conform to routines, switching from doing something they enjoy to something of lesser interest. They are expected to be able to follow directions with multiple interrelated steps and are required to control their attention by blocking out distractions. They have to be able to work with other children and focus on the learning task.

> **Our philosophy is that teaching should be more than transmitting facts and skills; it should teach children about learning itself, giving them the mental tools that will enable them to learn on their own.**

Self-regulation is what allows children to be successful in meeting these demands.

When children are self-regulated, every activity they engage in is a learning activity and they can follow rules without the teacher's support. Children who are not self-regulated can behave *if* the teacher is watching them and learn *if* the teacher is helping them pay attention, but without the teacher's direction, the child will not (cannot) learn. Moreover, when

teachers have to spend significant time regulating children in their classrooms, they have less time and attention to invest in supporting children's learning of academic skills, and challenging and individualizing instruction for all students.

In a survey of kindergarten teachers, 46 percent reported that more than half of their children do not have sufficient self-regulation. (Rimm-Kaufman, 2000.) Helping young children improve their self-regulation is critical to closing the achievement gap for many at-risk children, as well as helping all children reach their highest potential.

The good news: Early childhood is a key period for acquiring self-regulation in all its forms. This is why in a Tools of the Mind Kindergarten, teachers work deliberately to help children develop self-regulation.

> **"All children have to learn to be self-regulated. Teacher-regulation is not sufficient for the development of self-regulation."**

How does a focus on self-regulation translate to the kindergarten classroom?

The central focus of Tools of the Mind (Tools) is the development of both cognitive and social-emotional self-regulation *at the same time* that academic skills are taught. In Tools, the focus on self-regulation is not limited to a "stand alone" activity, but is embedded into the Tools curriculum. In a Tools Kindergarten:

✦ Practice in self-regulated learning is embedded into all activities.
✦ Teachers use mature intentional dramatic play as an activity to help children develop important underlying cognitive skills.
✦ Teachers emphasize the application of self-regulation to learning itself, facilitating self-regulation development in specially designed learning tasks.
✦ Research-based literacy and math activities are modified to include self-regulatory components.
✦ Specific instructional activities are designed to teach self-regulation and reflective thinking.
✦ Classroom management techniques maximize productive interactions and task involvement.

What is it like to be a Tools kindergarten teacher?

In Tools, the process of learning is as important as the content that is to be learned. Children in Tools Kindergartens use learning plans, work in "Study Buddy" pairs, engage in learning games and conference weekly with teachers to discuss their learning. The fall Kindergarten classroom activities are different from the spring activities to match both the design and content of activities to children's developmental needs and goals. Tools instructional interactions are planned to scaffold each child and to help teachers be more effective in identifying specific teachable moments. Tools teachers focus on helping children become intentional and reflective learners, creating a classroom in which instruction in literacy, mathematics and science reflects children's learning capacity, rather than age-level expectations.

Tools kindergarten teachers:

✦ **Develop** an understanding of scaffolding and individualization that reflect Vygotskian principles of teaching and learning.
✦ **Target** their interactions to children's individual zones of proximal development (ZPD).
✦ **Assess** children's learning and development on a daily basis to inform instructional decisions.
✦ **Know** the developmental progression of learning tasks and use this knowledge in their decision-making.
✦ **Recognize** that the kind of assistance they provide is critical because it affects when and how the child will eventually be able to perform a task independently.
✦ **Possess** the ability to provide the right level of scaffolding and maintain it at a level that fits the child's emergent competencies.
✦ **Know** how to use tactics like mediators, private speech, written language and shared activity to support learning.
✦ **Facilitate** children's development of a set of "Mental Tools," helping children become masters of their own learning.
✦ **Create** a classroom where children who are working independently are practicing skills correctly and in appropriate ways.

Examples of Tools K Activities

Graphics Practice

In Graphics Practice, children develop fine motor skills, practice letter formation and develop the penmanship and self-regulation skills needed for writing. They draw on white boards with markers, stopping and starting in response to musical cues. Children use private speech to help them remember how and what to write, learning to inhibit while also remembering the shape they're representing in writing.

Elkonin Boxes I and II

In Elkonin Boxes I and II, small groups of children jump on carpet squares, use a specific gesture or move symbolic tokens as they separate out the sounds in words looking at specially designed Elkonin Box cards that visually represent phonemes in the names of pictures like "cat." Children focus attention on specific parts of a word, use mediators and private speech while developing phonemic awareness and practicing the alphabetic principle.

Venger Drawing

In small groups, teachers help children plan and discuss various ways to incorporate a geometric shape into a drawing. Children use geometric terms and positional vocabulary, brainstorming possibilities from multiple perspectives. Children each verbalize a plan for their drawing and create a unique representation incorporating the geometric shape.

Learning Conferences

Children meet 1:1 with their teacher to set new learning goals and discuss their work habits, how they learn and any difficulties with concepts and skills. Teachers emphasize learning how to help yourself remember, practice effectively and stay motivated even when things are frustrating.

Venger Word Problems

In a collaborative partnered mathematics activity, children solve word patterns that require logical thinking with the aide of a number line and other mediators.

Characteristics of Tools of the Mind

⚙ Tools is a comprehensive curriculum including content that meets Common Core State Standards. Content is presented in an integrated, developmental way so that instruction forms a coherent whole.

★ The instructional formats and activities in Tools are research based.

⚙ Instructional strategies used in Tools include child-directed activities, teacher-directed activities and collaborative partner activities.

⚙ The thoughtful combination of instructional strategies and the matching of instructional strategy to activity is specifically designed to support self-regulation development and allow individualized instruction in academic skills.

◉ Individualization through multiple levels of scaffolding and on-going use of assessment data to tailor interactions to meet individual needs is central. Progress is monitored daily, weekly and monthly.
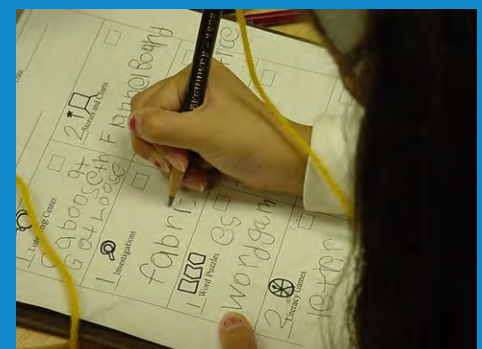
How Tools is implemented

⚙ Tools is designed as a core curriculum that works for all children including those with identified special needs.

◉ Tools activities are multi-level so instruction is individualized within the design of each activity. Individualizing instruction happens within all activities.

⚙ Teachers learn specific scaffolds to support children's development in all activities.

★ Tools provides literacy benchmarks, benchmark assessments and tracking support and guidance about how to meet the needs of children below, at and above benchmarks.

◉ Pacing Guides provide guidance to teachers about how to increase challenge across the year, ensuring that instruction matches end-of-year district benchmarks and goals.

⚙ A pair of Materials Kits with high usage materials are available for purchase through Lakeshore. Tools provides book lists for coordinated core readers. Consumable and activities templates are available to contracted districts for free download from password protected eTools webpage.

Evidence of Effectiveness

A randomized control design study (2014) found that Tools closed the achievement gap for at risk children, with positive effects on executive functions, reasoning, control of attention, reading, vocabulary and math. These effects extended into First Grade, with children from Tools classrooms learning at a faster rate than children from control classrooms. As well, significant effects on children's stress response physiology was seen in Tools of the Mind classrooms with a high percentage of at risk children.Tools classrooms were found to have a high level of emotional and instructional support regardless of children's social-economic level, eliminating the effects of poverty on classroom climate.

In another study, children in Tools classrooms were found to have higher rates of self-regulation in a National Institute for Early Education Research (NIEER) double-randomized study. This study compared children in Pre-K Tools classrooms with a control group using a high-quality ECE program with no emphasis on self-regulation. In addition to student gains, teachers trained in Tools scored higher in classroom management measures, used classroom time more productively and had a higher rate of appropriate and cognitively challenging interactions, as measured by the Early Childhood Environmental Rating Scale and the CLASS.

www.toolsofthemind.org

Professional Development

District capacity building is an important aspect of Tools training. Professional development is a two-year process. At the end of the two years, districts have a strong core of teachers who understand and can apply the theories that shape Tools of the Mind, with a new set of teaching skills and instructional strategies. The Tools professional development process is designed to have flexibility and responsiveness built in. Tools staff collaborate with districts to design the details of each district's professional development plan. Our professional development resources offer a range of ways to support adult learners––from in-person or virtual workshops to teacher materials on our password protected eTools section on our website, to the iScaffold app with video and Quick Start Guides for activities available on iPad or via a web browser. Teachers receive responsive, flexible and ongoing support through virtual and in-person site visits and iScaffold.

iScaffold Kindergarten

Year 1

In the first year, professional development rolls out in four phases, matching the developmental trajectory of child skills across the year. Teachers receive responsive, flexible and ongoing support through site visits and iScaffold.

Year 1 professional development workshops emphasize classroom management, self-regulation development, and literacy, math and science content areas.

Year 2

Year 2 professional development is designed to help teachers become more intentional in applying the underlying theory behind the program to their unique students and context. Core classroom practices, key steps in activities to support self-regulation development, and dynamic assessment and individualization of instruction are central focuses.

> " The strength of the Tools approach to professional development is the consistent focus on improving teacher performance through embedded technical assistance visits. The visits are more than one-stop meetings. Rather, they are visitations where consultants are available and willing to answer all questions from any member of the staff. "

Continuing Education

After the two years of Core Training, Tools of the Mind partners with programs to build Communities of Practice providing opportunities for teachers to collaborate with colleagues in the region and leave with action plans to target continued development. Single-day workshops focus on new topics, from social skills & social-emotional regulation development, to technology & interactive media in the Tools classroom, offering teachers new materials and ideas, and the chance to dig into discussions about how to further improve child outcomes in their classrooms and communities.

For more information

Phone: 720-541-9597

f /ToolsoftheMind
t @Tools_Mind
Web: www.toolsofthemind.org

National and International Recognition

UNESCO

In 2001, the International Bureau of Education, an arm of the United Nations Educational, Scientific and Cultural organization (UNESCO), named Tools an exemplary innovative educational program.

Others

Footage showing Tools classroom activities can be seen in the "Heads-up Reading" television series and the "Growing and Learning in Preschool" video produced by the National Institute for Early Education Research (NIEER). Scaffolded Writing, a technique invented by Tools to teach writing, has been named as a model literacy technique by the International Reading Association.

Further Reading

Blair C, Raver CC (2014) Closing the Achievement Gap through Modification of Neurocognitive and Neuroendocrine Function: Results from a Cluster Randomized Controlled Trial of an Innovative Approach to the Education of Children in Kindergarten. PLoS ONE 9(11): e112393. doi:10.1371/journal.pone.0112393 [Link]

S. Barnett, K. Jung, D. Yaroz, J. Thomas, A. Hornbeck. "Educational effects of the Tools of the Mind Curriculum: A randomized trial." *Early Childhood Research Quarterly,* March, 2008. [Link]

Diamond, S. Barnett, J. Thomas, and S. Munroe. "Preschool Program Improves Cognitive Control." *Science*, November 2007. [Link]

E. Bodrova and D. J. Leong. *Tools of the Mind* (2nd edition). Merrill/Prentice Hall, 2007.

E. Bodrova and D. J. Leong. "The Development of Self-Regulation in Young Children: Implications for Teacher Training." In M. Zaslow & I. Martinez-Beck (Eds.), *Future Directions in Teacher Training.* Brooks-Cole (p. 203-224), 2006.

E. Bodrova and D. J. Leong. "Vygotskian Perspectives on Teaching and Learning Early Literacy." In D. Dickenson & S. Neuman (Eds.), *Handbook of Research in Early Literacy Development* Volume 2, Guilford Press (p. 243-256), 2006.

BRITISH
COLUMBIA

Menu

Early Learning
Framework

Early Learning
Projects

Primary Years

Play Today

StrongStart BC

**Teaching and
Assessment Tools**

Reading for
Families

Ready, Set,
Learn

Training and
Professional
Development

Teaching and Assessment Tools

Kindergarten Learning Project

Use these field-developed and tested teaching and assessment materials to measure children's learning and development in the Kindergarten program.

Oral Language

Oral language provides the foundation for all literacy development. Talking about experiences and ideas builds the concepts used later in reading, writing, and numeracy.

- Oral Language Assessment Continuum (PDF)

Sample Assessment Profiles

- Oral language individual assessment 1 (PDF)
- Oral language individual assessment 2 (PDF)
- Oral language individual assessment 3 (PDF)
- Oral language class tally (PDF)

Social Responsibility

Learning is an interactive process for young children, and the development of social responsibility goes hand-in-hand with oral language development.

- Social Responsibility Assessment Continuum (PDF)

Sample Assessment Profiles

- Social Responsibility individual assessment 1 (PDF)
- Social Responsibility individual assessment 2 (PDF)
- Social Responsibility individual assessment 3 (PDF)
- Social Responsibility class tally (PDF)

Reading and Viewing

Kindergarten children develop as early readers through many experiences with

different forms of text in a print-rich environment.

- Reading and Viewing Assessment Continuum (PDF)

Sample Assessment Profiles

- Reading and Viewing individual assessment 1 (PDF)
- Reading and Viewing individual assessment 2 (PDF)
- Reading and Viewing individual assessment 3 (PDF)
- Reading and Viewing class tally (PDF)

Writing and Representing

As young learners begin to comprehend printed material, they express their ideas in a variety of forms that often combine drawing, abstract symbols and oral explanation.

- Writing and Representing Assessment Continuum (PDF)

Sample Assessment Profiles

- Writing and Representing individual assessment 1 (PDF)
- Writing and Representing individual assessment 2 (PDF)
- Writing and Representing individual assessment 3 (PDF)
- Writing and Representing class tally (PDF)

Numeracy

Early numeracy grows as children explore the everyday world of shape and space, patterns, and numbers through hands-on materials, games and number activities.

- Numeracy Assessment Continuum (PDF)

Sample Assessment Profiles

- Numeracy individual assessment 1 (PDF)
- Numeracy individual assessment 2 (PDF)
- Numeracy individual assessment 3 (PDF)
- Numeracy class tally (PDF)

Student Portfolio

Student profiles and portfolios are useful in discussions with families, other educators, or resource persons involved in supporting student growth. Teachers create profiles and portfolios by recording observations on the assessment continua

at several different points in the year. They also gather work samples and photographs that illustrate and supplement this information. A simple one-page summary sheet for organizing a student portfolio is provided in this section, along with examples of completed student profiles and portfolios.

- Learning Profile and Portfolio Template (PDF)

Sample Portfolio Documents

- Oral Language Portfolio 1 (PDF)
- Oral Language Portfolio 2 (PDF)
- Oral Language Portfolio 3 (PDF)

More Assessment Info

Explore how a child's progress is assessed once they are in the Kindergarten to Grade 12 school system.

- Assessment profiles for educators

Contact Information

For more information, please contact the Early Learning Team:

Email:
EDUC.EarlyLearning@gov.bc.ca

Did you find what you were looking for?

Assessment Instrument Table: DRA2

Element	Description	
Instrument Name	Name of specific instrument (more than vendor name).	Developmental Reading Assessment 2nd edition (DRA2)
Vendor	Name of the company or organization that produces the instrument.	Pearson
Purpose (Intended Use)	The described purpose and appropriate uses of the instrument.	**DRA2** enables primary teachers to systematically observe, record, and evaluate changes in student reading performance. DRA2 provides teachers with information that helps teachers determine each student's independent reading level and identify what the student needs to learn next. The **DRA Word Analysis** is a diagnostic assessment that provides classroom and reading teachers with a systematic means to observe how struggling and emerging readers attend to and work with the various components of spoken and written words. It is intended to support teachers to: 1. Determine students' level of control of various word analysis tasks. 2. Document students' progress over time. 3. Group students according to their instructional needs. 4. Plan more effectively for instruction.
Population	Who (which students) could be assessed using the instrument.	DRA2 can be used with students from kindergarten through eighth grade. It includes a K-3 kit and a 4-8 kit. The DRA Word Analysis is intended for: • Emerging readers in kindergarten and beginning first grade to identify their level of phonological awareness and basic knowledge of phoneme/grapheme relationships. • Struggling readers in the latter part of first grade through third grade who are reading below grade level or designated levels of proficiency due to ineffective word-solving skills and strategies. • Fourth- and fifth-grade students whose independent DRA reading level is 38 or below.
When? How frequently?	How frequently the instrument can be administered in a school year, and	The DRA2 assessment can be used on a semi-annual or annual basis to monitor and document change over time in each student's reading. It may be used more frequently with

	recommended or required administration windows.	struggling readers to ensure continued progress. Testing windows are set at the local level. CDE encourages districts to administer DRA2 at least three times during the school year. **DRA Word Analysis** should be administered during the first part of the school year after the DRA2 has been administered to students in first through fifth grades. Teachers will use the information gained from the DRA2 to determine which emerging and/or struggling readers should be given this assessment. It is best to wait until midyear to give this assessment to emerging readers in kindergarten. It is also recommended that teachers re-administer the DRA Word Analysis midyear and at the end of the school year to: • Determine if students have gained control of those tasks that they initially demonstrated no, little, and/or some control. • Identify a new focus of instruction for students who are still reading below a designated level of proficiency on the DRA2 due to ineffective word-solving skills and strategies.
Content Area (s)	Content area or areas being assessed.	Reading
Learning Objectives	Specific learning objectives being assessed, at as detailed a level as is provided. This may be "topics" or categories or may be actual learning objective statements.	**DRA 2** Reading engagement (student survey) -- describes the student's level of engagement with reading. Engaged readers read often, know books and authors, and have goals for themselves as readers. Oral reading fluency (student oral reading of text at an appropriate level) Comprehension (retell, responding to comprehension questions, write summaries) **DRA Word Analysis** 1) Phonological awareness: rhyming, alliteration, phonemic awareness, and segmentation 2) Phonics: encoding, decoding, substitutions/analogies 3) Meta-language (language used to talk about printed language concepts) 4) Letter/Word Recognition 5) Structural Analysis and Syllabication
Individual Metrics	The scores provided at the individual (student) level.	**DRA2 Scores:** • Students receive individual scores for reading engagement, oral reading fluency and comprehension/printed language concepts. Depending on the student's independent

reading level, scores are translated into a performance level of: intervention, instructional, independent, or advanced.

- Students oral reading fluency and comprehension/printed language concepts scores are combined to determine an *overall performance level*, which also depends on the students independent reading level. Overall performance level ratings include: Emerging, Developing, or Independent for Levels A–12; and Intervention, Instructional, Independent, or Advanced for Levels 14–40.
- Students also receive an independent reading level rating from level A to level 40 (A, 1, 2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 28, 30, 34, 38, and 40). Independent Reading Level is the reading level at which the student can engage with the text independently (e.g., the teacher does not provide any scaffolding). The student's total score in Oral Reading/Oral Reading Fluency and the student's total score in Comprehension/ Printed Language Concepts determines whether a text was read at an independent, instructional, or advanced level.

The relationship between student performance ratings and independent reading levels are described in greater detail below:

Reading Engagement: Teachers rate students' responses in the Student Reading Survey. Scores range from 2 to 8, where scores of 2 to 3 indicate an Intervention level of performance, scores of 4 to 5 indicate an Instructional level of performance, scores of 6 to 7 indicate an Independent level of performance, and a score of 8 indicates an Advanced level of performance.

Oral Reading Fluency: At levels 14-80, Oral Reading Fluency describes the student's oral reading behaviors in terms of expression, phrasing, rate, and accuracy. At levels 4-12, Oral Reading Fluency is comprised of phrasing, monitoring/self-corrections, problem-solving unknown words, and accuracy. The Oral Reading Fluency score is the sum of the four indicators (e.g., for levels 14-80, Expression, Phrasing, Rate, and Accuracy). Scores range from 4 to 16, where scores of 4 to 6 indicate an Intervention level of performance, scores of 7 to 10 indicate an Instructional level of performance, scores of 11 to 14 indicate an Independent level of performance, and scores of 15 to 16 indicate an Advanced level of performance.

Comprehension/ Printed Language Concepts:

Comprehension describes the student's ability to retell and understand the text including the main ideas, key facts, and characters, events, or topics. At lower levels (A- 3), printed language concepts are evaluated. At Levels A–1, the student's use of printed language concepts is evaluated, specifically directionality and one-to-one correspondence. At Levels 2–3, evaluation of students' use of words/letters is added. At Levels 4–24, in addition to evaluating the student's retelling of the story (including the sequence of events, characters and details, and key vocabulary), the teacher evaluates the student's preview or predictions about the story, the level of interpretation of the story, the level of reflection on the story, and how much teacher support the student required to retell the story. At Levels 4–16 only, a student's performance is evaluated for making connections with the text. At Levels 28–80, teachers rate the student's responses to the questions and prompts in the Student Booklet. At Levels 28–38, teachers also evaluate the use of key vocabulary in the summary. At Levels 40–80, teachers additionally evaluate the skill of Metacognitive Awareness. Each task is rated on a four-point scale. Different descriptions are used for fiction and nonfiction texts for Summary and Reflection and also for texts at Levels 28– 38 versus Levels 40–80. The teacher selects the best description of the student's performance on each indicator and sums the score to obtain the Comprehension score. Comprehension scores range in DRA2 K–3 from 7 to 28 (except Level 40, which ranges from 6–24); and in DRA2 4–8, scores range from 6 to 24.

With DRA2 K–3 (except Level 40), scores of 7 to 13 reflect an Intervention level of performance; scores of 14 to 18 reflect an Instructional level of performance; scores of 19 to 25 reflect an Independent level of performance; and scores of 26 to 28 reflect an Advanced level of performance. For independent reading level 40, scores of 6 to 11 indicate an Intervention level of performance, scores of 12 to 16 indicate an Instructional level of performance, scores of 17 to 22 indicate an Independent Level of performance, and scores of 23 to 24 indicate an Advanced Level of performance.

DRA Word Analysis

A total of 40 tasks are available. Each task produces a raw score (range of 7-50), which can be categorized into four levels of control:
- No/Little Control (0-39% correct)
- Some Control (40-79% correct)

- Gaining Control (80-99% correct)
- Control (100% correct)

Testing stops when the student is no longer able to perform well on any three tasks (i.e., does not demonstrate control).

Individual Comparison Points (cut scores)	Information provided regarding how good is good enough performance on the instrument. Comparison information should be available for every individual metric. This may be performance level ratings with specific cut scores.	Students **reading engagement**, **oral fluency**, **comprehension/printed language concepts** are rated at four levels: Intervention, Instructional, Independent and Advanced. Students rated at an "independent" or "advanced" level are considered proficient.

Independent Reading Level Expectations:

Note: the spring reading level is the end of year expectation for each grade level.

Grade	Time	Proficient/Independent	Instructional
Kindergarten	Fall	Pre A	
	Mid-Year	1	A
	Spring	3	2
1st Grade	Fall	3	2
	Mid-Year	8	6
	Spring	16	14
2nd Grade	Fall	16	14
	Mid-Year	20	18
	Spring	28	24
3rd Grade	Fall	28	24
	Mid-Year	34	28
	Spring	38	30-34
4th Grade	Fall	38	30-34
	Mid-Year	38 (34-39)	34
	Spring	40 (28)	38
5th Grade	Fall	40 (28)	38
	Mid-Year	40 (34-36)	38
	Spring	50 (28)	10
6th Grade	Fall	50 (28)	10
	Mid-Year	50 (33)	10
	Spring	60 (28-30)	50
7th Grade	Fall	60 (28-30)	50
	Mid-Year	60 (32-34)	50

		Spring	70 (31-33)	60
8th Grade	Fall	70 (31-33)	60
	Mid-Year	70 (35-36)	60
	Spring	80 (31-32)	70

Individual Comparison Points (CDE)	Cut Scores for Significant Reading Deficiency	CDE has identified the following cut scores for students *independent reading level* as scored by DRA2. Students scoring at the identified independent reading level or lower would be identified has having a significant reading deficiency.

	Fall	**Winter**	**Spring**
Kindergarten	NA*	NA**	A
1st Grade	A	6	10
2nd Grade	10	14	18
3rd Grade	18	20	28

*Kindergarten: For the beginning and middle of the year, teachers should use the Word Analysis assessments from DRA2 for Kindergarten students to determine a Significant Reading Deficiency. For the beginning of the year, teachers should use Tasks 3, 5, and 6 (Isolating Initial Sound, Recognizing Lowercase Letters, and Recognizing Capital Letters). Students should score higher than 3 on Task 3 (Isolating Initial Sound) and higher than 9 on Tasks 5 and 6 (Recognizing Lowercase and Capital Letters). Students must score above the cut-off score on at least one of the three tests to not be identified as having a Significant Reading Deficiency.

**Kindergarten: For the middle of the year, in addition to Tasks 3, 5, and 6, teachers should use Task 21 (Segmenting Words into Phonemes). Students should score higher than 7 on Task 3 (Isolating Initial Sound), higher than 20 on Tasks 5 and 6 (Recognizing Lowercase and Capital Letters), and higher than 5 on Task 21 (Segmenting Words into Phonemes). Students must score above the cut-off score on at least one of the four tests to not be identified as having a Significant Reading Deficiency.

Aggregate Metrics	Scores provided at the group level. The group could be a grade level, school, district, or disaggregated groups (e.g. race/ethnicity, gender, IEP status, FRL status) Specify the group(s) and the score(s) provided.	• The number and/or percent of students reading at the independent or advanced level for the expected independent reading level (by grade level) • The number and percent of students identified as having a significant reading deficiency (by grade level)

Aggregate Comparison Points (cut scores)	Information provided regarding how good is good enough performance at the group level.	None provided by vendor.
Aggregate Comparison Point (CDE)	CDE has established comparison points for requests to reconsider	50% of students receive an independent or advanced over-all performance level rating for the target independent reading level.
Alignment	Information provided by the vendor about alignment of this instrument to other instruments, standards, etc.	Concurrent validity is reported in the technical manual (Page 56): http://assets.pearsonschool.com/asset_mgr/current/20139/DRA2_Technical_Manual_2012.pdf
Data Reports	Description of data reports that are provided/available at the individual and aggregate level(s).	**Student Reports:** Student Progress Over Time Book Graph (K-3, 4-8) Assessment Summary Continuum Word Analysis and FFI Summary **Class Reports:** Class Completion Class Reporting Form Class Focus for Instruction Summary Class Focus for Instruction Detail Class Word Analysis Group Profile Class Word Analysis Group Profile Detail Class Word Analysis Performance Class Word Analysis Performance Detail Class Word Analysis Task Performance Class Word Analysis History Class Word Analysis FFI Summary Class Word Analysis FFI Detail Historical Reports Class List/Student Students per Reading Level Students per Reading Stage Focus Group

	Demographics Word Analysis Completion Word Analysis Performance DRA2 online management system is described here: http://www.pearsonschool.com/index.cfm?locator=PSZw5u&PMDBSUBCATEGORYID=&PMDBSITEID=2781&PMDBSUBSOLUTIONID=&PMDBSOLUTIONID=6724&PMDBSUBJECTAREAID=&PMDBCATEGORYID=3289&PMDbProgramID=23721
Technical Quality	Technical report: http://assets.pearsonschool.com/asset_mgr/current/20139/DRA2_Technical_Manual_2012.pdf

PEARSON CRITERION RELATED VALIDITY ON THE DRA   Criterion-related validity refers to the extent to which a measure predicts performance on some other significant measures, (called a criterion) other than the test itself. Criterion validity may be broken down into two components: concurrent and predictive. Concurrent validity correlates the DRA to many other reading tests: Gray's Oral Reading Test-4th Edition GORT-4; Wiederholt & Bryant, 2001 DIBELS Oral Reading Fluency Test-6th Edition; Correlations Between DRA2 and Teacher Ratings

DRA REVIEW, NATALIE RATHVON, PH. D. The following evidence of validation is based upon the review of the DRA completed by: Natalie Rathvon, Ph.D., Assistant Clinical Professor, George Washington University,Washington DC, Private Practice Psychologist and School Consultant, Bethesda, MD (August 2006):
DRA CONTENT VALIDITY. Oral Fluency, running record-derived from only Clay's Observational Survey (Clay, 1993). Teacher surveys (return rates were 46%), conducted (ns of 80 to 175) revealed that DRA provided teachers with information describing reading behaviors and identifying instructional goals.
CONSTRUCT VALIDITY EVIDENCE Results from Louisiana statewide DRA administrations for Spring of 2000 through 2002 for students in Grades 1 through 3 (ns = 4,162 to 74,761) show an increase in DRA levels across grades, as well as changes in DRA level for a matched sample of student (n = 32.739) over a three year period. This indicates that the skills being measured are developmental. The DRA can detect changes in reading levels. As evidenced in two studies evaluating the relationship between Lexile Scale measures and DRA running-record format is a valid method of assessing reading comprehension.
SUMMARY OF WHAT DRA IS: An attractive reading battery modeled after an informal reading inventory based Clay's Observational Survey (Clay, 1993)   Instructionally relevant measures of fluency and comprehension. Provides meaningful results for classroom teachers, parents, and other stakeholders. Encouraging evidence that the use of DRA predicts future reading achievement for primary grade students.
DRA CRITERION RELATED VALIDITY: There is a need for studies examining the extent to which individual students obtain identical performance levels on the DRA and validated reading measures.

Student Name: _____

Kindergarten Emergent Literacy Continuum: Reading and Viewing

Developmental Aspects	Emerging With direct support…	Developing With guided support…	Applying With minimal support…	Extending
The Child	With direct support may draw on personal connections to make meaning while participating in a variety of reading/viewing experiences.	With guided support draws on and begins to develop strategies to make meaning (e.g., making connections, predicting, asking questions, and reflecting) while participating in a variety of reading/viewing experiences.	With minimal support draws on, and expands strategies to make meaning (e.g., making connections, predicting, asking questions, and reflecting) while participating in a variety of reading/viewing experiences.	Draws on, expands and begins to identify strategies to make meaning (e.g., making connections, predicting, asking questions, and reflecting) while participating in a variety of reading/viewing experiences.
Thinking/Metacognition				
Developing dispositions—awareness, attention, interest, participation, curiosity, engagement, perseverance	With direct support may attend to and may participate in reading/viewing activities (e.g., makes meaning from text using pictures, patterns, memory, prior knowledge).	With guided support engages in reading/viewing activities (e.g., makes meaning from text using pictures, patterns, memory, prior knowledge).	With minimal support purposefully engages in reading/viewing activities (e.g., makes meaning from text using pictures, patterns, memory, prior knowledge).	Purposefully engages in reading/viewing activities (e.g., makes meaning from text using emergent reading strategies).
Setting purposes	With direct support may participate in setting a purpose for reading/viewing.	With guided support sets a purpose for reading/viewing.	With minimal support chooses a purpose for reading/viewing.	Identifies a purpose for reading/viewing; participates in the reading/viewing process.
Processing	With direct support may express some thoughts and understanding before/during and after reading/viewing; may be unrelated to topic.	With guided support expresses some thoughts and understanding before/during and after reading/viewing.	With minimal support expresses thoughts and understanding before/during and after reading/viewing.	Expresses thoughts and understanding before/during and after reading/viewing.
Reflecting	With direct support may participate in the reading/viewing process; may say something about reading/viewing experience.	With guided support participates in the reading/viewing process, says something about reading/viewing experience.	With minimal support participates in the reading/viewing process; reflects on learning—may include purpose, process, experience.	Participates in the reading/viewing process and reflects on learning—may include purpose, process, experience.
Comprehension/Response				
Using strategies—use prior knowledge, predict and confirm meaning, ask questions, locate details, create mental images, make inferences	With direct support may use some of the text features (e.g., pictures, patterns, clues from the text) to contribute to discussions before, during, and after reading/viewing; contributions may be unrelated.	With guided support uses some of the text features (e.g., pictures, patterns, clues from the text) to contribute to discussions before, during, and after reading/viewing; contributions are related.	With minimal support uses the text features (e.g., pictures, patterns, clues from the text) to contribute to discussions before, during, and after reading/viewing; contributions are more detailed.	Uses the text features—(e.g., pictures, patterns, clues from the text) to contribute to discussions before, during, and after reading/viewing; contributions may include evidence and/or some justification.
Making connections	With direct support may attempt to make a connection to reading/viewing material; connection may seem unrelated to reading/viewing material.	With guided support makes some connection to reading/viewing material.	With minimal support makes connections to reading/viewing material.	Makes connections to simple and complex reading/viewing material.
Retelling	With direct support may retell; retelling may be unrelated to reading/viewing material.	With guided support retelling is related to reading/viewing material.	With minimal support retelling includes some elements of the reading/viewing material (e.g., character, main idea, interesting facts).	Retelling includes elements of the reading/viewing material (e.g., character, main idea, interesting facts); may include the 'gist' of the reading/viewing material.
Features				
Demonstrating concepts of print	With direct support may demonstrate concepts of print (e.g., front/back of book, directionality).	With guided support demonstrates some concepts of print (e.g., front/back of book, directionality, points to words on the page).	With minimal support demonstrates many concepts of print (e.g., front/back of book, directionality, points to words on the page).	Demonstrates many concepts of print (e.g., front/back of book, directionality, points to words on the page, tracks with finger using one to one matching).
Recognizing letter-sound relationships	With direct support may be able to name and recognize a few upper or lower case letter-sound relationships.	With guided support is able to name and recognize some upper and/or lower case letter-sound relationships.	With minimal support names and recognizes many upper and lower case letter-sound relationships.	Names and recognizes most upper and lower case letter-sound relationships.
Recognizing words	With direct support may be able to identify a word in the environment (e.g., points to a printed word rather than a picture).	With guided support recognizes a few words (e.g., own name, environmental print, class names, familiar words).	With minimal support recognizes words (e.g., own name, environmental print, class names, familiar words).	Recognizes many words; may begin to use decoding strategies for unfamiliar words (e.g., sight words, environmental print, class names).
The Support/Scaffolding*	**The Model:** showing, instructing, explaining, directing, making explicit, demonstrating, giving examples	**The Coach:** structuring, sequencing, focusing, cueing, guiding, organizing, supporting	**The Advisor:** suggesting, reminding, prompting, monitoring, asking for elaboration	**The Mentor:** extending, stretching, wondering aloud, exploring, "what if-ing"
***a variety of supports (teachers, peers, environmental, etc.) can be provided at any stage of development**				

Date code: Comments: Final 03/09

Adapted from SD 69 Kindergarten Assessment Committee 2004

Please note: This continuum is not meant to be used as a performance standard

Student Name: _____

Kindergarten Emergent Literacy Continuum: Writing and Representing

Developmental aspects	Emerging With direct support…	Developing With guided support…	Applying With minimal support…	Extending
The Child	With direct support, may participate in writing/ representing experiences to communicate a message. May understand writing/representing as thoughts written down.	With guided support, participates in writing/ representing experiences by using approximations of emergent symbol systems (a combination of picture, oral description and symbols). Meaning is conveyed more in picture and oral description than in print.	With minimal support, participates in writing/ representing experiences using an emergent symbol system (a combination of picture, oral description and conventional letters) to communicate ideas. Meaning is beginning to be conveyed in the writing.	Participates in writing/representing experiences using a mixture of emergent and conventional symbol systems. Meaning is conveyed in both the writing and the accompanying representations and oral description.
Thinking/Metacognition				
Developing dispositions—awareness, attention, interest, participation, curiosity, engagement, perseverance	With direct support may attend to and may participate in writing/representing activities.	With guided support engages in writing/representing activities.	With minimal support purposefully engages in writing/representing activities.	Purposefully engages in writing/representing activities.
Processing	With direct support may voice some thoughts before/ during and after writing/representing; may be unrelated to topic. With direct support may participate in the writing/representing process.	With guided support voices some thoughts before/ during and after writing/representing. With guided support participates in the writing/representing process.	With minimal support voices thoughts before/during and after writing/representing. With minimal support participates in the writing/ representing process.	Voices thoughts before/during and after writing/representing. Participates in the writing/representing process.
Reflecting	With direct support may say something about writing/representing process.	With guided support says something about writing/representing process.	With minimal support reflects on writing/representing process and learning.	Reflects on writing/representing process and learning.
Purpose				
Understanding purposes	With direct support may share personal experiences, feelings, ideas, or information in an oral or representational form.	With guided support shares personal experiences, feelings, ideas, or information in an oral/written/ representational form. Beginning to recognize that writing/representing is talk written down.	With minimal support shares personal experiences, feelings, ideas, or information in a written/representational form. Recognizes that writing/representing is talk written down (e.g., mental image matches writing/representing).	Uses writing/representing to share personal experiences, feelings, ideas, or information.
Understanding and using a variety of forms	With direct support may approximate a model to communicate in an oral/representational form (e.g., labels, signs, lists, journals, stories, letters).	With guided support approximates a model to communicate in an oral/representational form (e.g., labels, signs, lists, journals, stories, letters). Beginning to choose a written/representational form for expression of ideas.	With minimal support follows a model to communicate in an oral/representational form (e.g., labels, signs, lists, journals, stories, letters). Beginning to choose a written/representational form that aligns with purpose.	May follow a model or independently select a written/representational form to communicate (e.g., labels, signs, lists, journals, stories, letters).
Meaning				
Expressing meaning through drawing	With direct support may draw random scribbles without recognizable forms in a picture.	With guided support attempts to draw a picture that is related to topic and contains some recognizable forms.	With minimal support draws a recognizable picture with some detail that is related to topic.	Draws a detailed picture that is related to topic.
Expressing meaning through print	With direct support may express meaning using representational print forms.	With guided support expresses meaning using representational print forms.	With minimal support expresses meaning using representational print forms.	Expresses meaning using representational print forms.
Explaining writing/representing	With direct support may provide some simple oral detail about writing/representing.	With guided support provides some oral detail about writing/representing.	With minimal support shares ideas or gives information about writing/representing.	Shares ideas or gives more complex information about writing/representing.
Features				
Using concepts of print	With direct support may use some concepts of print to represent meaning.	With guided support uses some concepts of print to represent meaning.	With minimal support uses more complex concepts of print to represent meaning.	Uses complex concepts of print to represent meaning.
The Support/Scaffolding*	**The Model:** showing, instructing, explaining, directing, making explicit, demonstrating, giving examples	**The Coach:** structuring, sequencing, focusing, cueing, guiding, organizing, supporting	**The Advisor:** suggesting, reminding, prompting, monitoring, asking for elaboration	**The Mentor:** extending, stretching, wondering aloud, exploring, "what if-ing"
*a variety of supports (teachers, peers, environmental, etc.) can be provided at any stage of development				

Date code: Comments: Final 03/09

Kindergarten Emergent Literacy Continuum: Numeracy

Developmental aspects	Emerging With direct support…	Developing With guided support…	Applying With minimal support…	Extending
The Child	With direct support and teacher modeling, may participate in and may attempt to make sense of mathematical experiences.	With guided support, demonstrates a willingness to explore mathematical ideas while participating in problem solving experiences. Is beginning to show an awareness of number, space and time used in everyday life.	With minimal support, demonstrates interest in and willingness to explore mathematical ideas while purposefully participating in problem solving experiences. Communicates an awareness of how number, space, and time are used in everyday life.	Shows interest and curiosity while purposefully exploring mathematical problem solving experiences. Perseveres. Makes and explains connections to number, space and time as used in everyday life.
Dispositions				
Developing dispositions—attending, participating; showing interest, curiosity, engagement, perseverance	With direct support, may attend to and may participate in some familiar mathematical problem solving situations.	With guided support, shows interest in and participates in familiar mathematical problem solving situations.	With minimal support, purposefully engages in problem solving, and makes some attempt to solve familiar problem solving situations.	With confidence, curiosity, perseverance uses a range of strategies to make sense of familiar and new situations.
Processes				
Communicating using math vocabulary	With direct support, may imitate, copy, repeat a limited math vocabulary.	With guided support, uses and understands basic math vocabulary.	With minimal support, uses and understands a wide math vocabulary.	Uses and understands an extensive math vocabulary including comparative language.
Explaining thinking, using metacognition, and making connections	With direct support, may describe thinking which may or may not be related to the task at hand.	With guided support, is beginning to explain thinking. May need prompts.	With minimal support, makes connections and explains some aspects of thinking.	Explains thinking independently and in detail; makes personal connections.
Representing by building, drawing, or acting out	With direct support, may use materials, pictures, drawings or acting out to represent mathematical ideas.	With guided support, uses materials, pictures, drawings or acting out to represent mathematical ideas.	With minimal support, uses appropriate materials, pictures, drawings or acting out to represent mathematical ideas.	Uses materials, pictures, drawings or acting out to effectively represent mathematical ideas.
Understanding Shape and Space				
Matching and sorting	With direct support, sorts and classifies as directed, using an obvious attribute.	With guided support, sorts and classifies using an obvious attribute.	With minimal support, recognizes and describes similarities and differences in order to sort and classify.	Sorts mixed materials on the basis of different attributes; resorts; describes classifications.
Comparing and ordering	With direct support, may compare and order materials on the basis of, e.g., length.	With guided support, compares and orders materials on the basis of, e.g., size.	With minimal support, compares and orders materials on the basis of, e.g., size and shape.	Compares objects, describes differences, orders/sequences, e.g., day plan.
Constructing 3D models of everyday objects	With direct support, uses building materials, and may name the representation.	With guided support, builds and connects the representation to a specific object (e.g., this is a bridge)	With minimal support, builds a somewhat recognizable structure, and describes the representation using simple language.	Builds representations with key features and details, and describes using comparative language.
Understanding Pattern				
Identifying, copying, extending, and creating patterns	With direct support, may identify and copy patterns with concrete materials, music, action, and/or language patterns.	With guided support, identifies, copies and extends a given simple repeating pattern, and may create patterns intentionally.	With minimal support, identifies, copies, extends and creates a simple repeating pattern. Beginning to recognize a pattern core or stem.	Identifies, copies, extends and creates patterns of increasing complexity. Describes connections between patterns and recreates patterns in different ways.
Seeing and describing patterns in our world	With direct support, may identify a repeating pattern in our world.	With guided support, identifies a repeating pattern in our world.	With minimal support, identifies and describes a repeating pattern in our world.	Spontaneously identifies and describes repeating patterns in our world.
Understanding Number				
Rote counting	With direct support, may join in to a choral count.	With guided support, rote counts with some consistency.	With minimal support, rote counts with consistency.	Rote counts extensively, with fluency and consistency.
Quantifying	With direct support, may count small quantities and may recognize some dot patterns.	With guided support, counts quantities (e.g., to 6 or 7) and recognizes some dot patterns.	With minimal support, counts quantities (e.g., to 10) and recognizes dot patterns, (e.g., dice).	Consistently and accurately counts quantities to 10 (min.) and recognizes number patterns (e.g., dice, ten frames).
Comparing quantities	With direct support, may show which quantity is more or less than another, or the same.	With guided support, matches materials to compare quantities. May use terms more, less, or same.	With minimal support, counts or matches quantities to determine more, less or same.	Recognizes, explains, and models which quantity is more, less, or the same as another.
Matching numerals and sets	With direct support, may recognize/read some numerals and may match numerals and sets.	With guided support, recognizes/reads numerals, and matches numerals and sets with some consistency.	With minimal support, recognizes/reads numerals and matches numerals and sets to 10.	With ease and consistency, works with numerals and sets to 10 and beyond.
Representing numbers	With direct support, may represent number (e.g., by copying the model).	With guided support, represents number (e.g., shows requested number of objects).	With minimal support, uses actions, materials, pictures, words to show how many.	Represents numbers confidently, and in a variety of ways. (e.g., words, pictures, symbols, materials…)
Connecting number to everyday situations	With direct support, may recognize the use of number in everyday situations.	With guided support, connects number to everyday situations. (e.g. birthdays, time, temperature, etc.)	With minimal support, connects number to everyday situations. (e.g. attendance)	Spontaneously connects number to everyday situations.
The Support/Scaffolding*	**The Model:** showing, instructing, explaining, directing, making explicit, demonstrating, giving examples	**The Coach:** structuring, sequencing, focusing, cueing, guiding, organizing, supporting	**The Advisor:** suggesting, reminding, prompting, monitoring, asking for elaboration	**The Mentor:** extending, stretching, wondering aloud, exploring, "what if-ing"
*a variety of supports (teachers, peers, environmental, etc.) can be provided at any stage of development				

Date code: Comments:

Final 03/09

Please note: This continuum is not meant to be used as a performance standard

UBC Kindergarten Teacher Survey

Items in Blue were asked only in early October.
Items in Green were asked only in May.
Items in Black were asked at both Timepoints.

1. Name (Only so I can ask you for clarification later. Your anonymity will be completely protected!)

2. School (Only so I can get background information about your neighborhood should I need it. Neither your name or school will be provided to ANYONE.)

3. Number of years teaching

4. Number of years teaching kindergarten

5. Please describe your classroom

Choose the number of children

Number of children in your class

Number of children with special needs

Number of ESL (English as a second language) children

Number of children receiving free lunch

6. In what ways, if any, did the extra $1000 you received this year for supplies help your teaching and/or student outcomes?

7. Do you use aspects of any self-regulation or socio-emotional program in your classroom (e.g., MindUp or Second Step)? What is the name of the program?

8. Did you have children who have difficulty interacting in the classroom?

No

If yes, how many children have difficulty?

9. If you have children who have difficulty interacting: What kinds of negative social interactions do you notice (e.g., defiance toward the teacher or another adult, hitting, fighting, hair pulling, name calling, taking something from another child, refusing to be paired with another child, etc)

10. If you have children who have difficulty interacting: How frequently do these behaviors occur?

Almost never

Occasionally/sometimes 1-2 times a week

Almost every day 3-5 times a week

1-2 times most every day

Several times a day

11. Please indicate your level of agreement with the following statements about most of the children in your classroom

	Agree	Disagree
Overall, children are pretty good about getting back to work after recess		
Overall, children are pretty good about getting right back to work after weekends		

12. Overall, were/are children in your class good about getting back to work after holidays

	(Strongly Disagree)	(Disagree)	(Somewhat Disagree)	(Somewhat Agree)	(Agree)
Overall, they were pretty good about getting right back to work after their Winter break.					
Overall, they were pretty good about getting right back to work after their Spring break.					

13. If someone came in your room, how long did you feel you could talk with that person and let thechildren in your class work on their own without supervision?

Children could not work on their own at all

1-2 minutes

3-5 minutes

6-8 minutes

9-10 minutes

11-15 minutes

More than 15 minutes

14. Please add any comments you'd like to about your students regarding self-regulation, self-control, or being able to work independently at the beginning of the year or now

15. Classroom Friendships and Community

	Yes	no
In general, do the children in your class show clear preferences for which children they'd like to do things with (e.g., which child they'd like to play with)?		
Do you feel there is/are any child/children who is/are generally less popular in your class and more likely to be left out?		
Have you noticed any cliques forming in your class?		

16. Please indicate your level of agreement with the following questions:

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly agree
Children in my class are competitive with one another						
Children in my class cheer at one another's successes.						

17. How would you rate the sense of community in your class at beginning of the school year and now?

	No sense of community 1	2	3	4	5	6	7	8	9	We're a close knit community 10

18. Please add any comments you'd like to about classroom community, children's acceptance of one another's differences, children's ability to get along with one another, etc.

19. If you have any comments about your children's reading levels or skills please add them here:

20. If you have any comments about your children's oral language, vocabulary, or skills, please add them here:

21. Writing Development

How many of your children were at the following writing levels (independently, without teacher help)? Please count each child only once in your responses and indicate the highest level at which each child was performing (total number should be equal to total number of children in your classroom).

	Number of children
Scribbling	⬍
Drawing a picture	⬍
Can copy their first name	⬍
Can copy sentences from the board	⬍
Write their first name without copying	⬍
Can write most letters when asked to write the letter	⬍
Write initial sounds for many words	⬍
Write simple 2-4 letter words with invented spelling on own	⬍
Write multi-syllabic words with intended spelling with most sounds represented	⬍
Write a full sentence composed by child with invented spelling with most sounds represented	⬍
Write 2 or more consecutive full sentences composed by child with invented spelling with most sounds represented	⬍
Other (please specify)	⬍

[ ]

22. Writing Development

How many of your children are at the following writing levels (independently, without teacher help)? Please count each child only onceand indicate the highest level at which each child is performing (total number should be equal to total number of children in your classroom).

	Number of children
Scribbling	[▼]
Drawing a picture	[▼]
Can copy their first name	[▼]
Can copy sentences from the board	[▼]
Write their first name without copying	[▼]
Can write most letters when asked to write the letter	[▼]
Write initial sounds for many words	[▼]
Write simple 2-4 letter words with invented spelling on own	[▼]
Write multi-syllabic words with intended spelling with most sounds represented	[▼]
Write a full sentence composed by child with invented spelling with most sounds represented	[▼]
Write 2 or more consecutive full sentences composed by child with invented spelling with most sounds represented	[▼]
Other (please specify)	[▼]

[ ]

23. If any of your children are writing multiple sentences (I realize everyone might write 0):

	Number of children
How many children can write a string of 2 sentences they compose?	[▼]
How many children can write a string of 3 sentences they compose?	[▼]
How many children can write a string of 4 or more sentences they compose? (If this a ridiculous option to offer, I apologize)	[▼]

24. Are any of your children (I realize everyone might write 0) writing with:

	Number of children
Punctuation	[▼]
Capitalization	[▼]

25. Please add any comments you'd like to about your children's writing:

26. Please add any comments you'd like about your children's math skills:

27. Your opinions and experiences

At this time in the school year, many teachers start to feel exhausted, burned out, or ready for the summer break. On a scale of 1-10, how would you rate how you are feeling now?

Excited about teaching, Energized	2	3	4	5	6	7	8	9	Exhausted Burned out, weary

28. On a scale of 1-10, how do you feel looking ahead to the next school year?

Excited about starting again, totally energized	9	8	7	6	5	4	3	2	Not looking forward to it, Looking forward to retirement

29. What have you liked/enjoyed most about your class this year?

30. What has been most challenging about your class for you this year?

31. What have you liked/ enjoyed most about teaching this year?

32. What has been most challenging about teaching for you this year?

Thank you again! I am sincerely grateful for your taking time out of your busy day to respond to these questions. *Adele Diamond*

Any other comments are welcome:

Done

Powered by **SurveyMonkey**
Check out our sample surveys and create your own now!

Page 7 of 7

**S4 – Table
All Dependent Measures analyzed,
with Subsidized Lunch, English as a Second Language (ESL), and Years Teaching as Covariates**

Dependent Variable	Analyses controlling for % receiving Subsidized Lunch, centered	Analyses controlling for % ESL, centered	Analyses controlling for Years of Teaching, centered
Comparing children's improvement in reading over the kindergarten year in *Tools* classes vs. in Control classes			
Improvement in Reading	$\chi^2(1, N = 18) = 4.64$, $p = 0.02$, odds ratio = 3.25 Covariate: $p = 0.03$	$\chi^2(1, N = 18) = 4.72$, $p = 0.02$, odds ratio = 3.30 Covariate: $p = 0.03$	$\chi^2(1, N = 18) = 4.30$, $p = 0.03$, odds ratio = 3.05 Covariate: $p = 0.22$
Comparing the percentage of children who were reading at Grade 1 level or better by May in *Tools* classes vs. in Control classes			
% Reading at $\geq$ Grade 1 level	$F(1,15) = 6.67$, $p < 0.02$, $\eta p^2 = 0.33$ Covariate: $p = 0.13$	$F(1,15) = 6.43$, $p < 0.02$, $\eta p^2 = 0.32$ Covariate: $p = 0.38$	$F(1,15) = 4.39$, $p = 0.05$, $\eta p^2 = 0.24$ Covariate: $p = 0.67$
Comparing the percentage of children who were still non-readers by May in *Tools* classes vs. in Control classes			
% Non-readers	$F(1,15) = 6.02$, $p = 0.02$, $\eta p^2 = 0.29$ Covariate: $p = 0.05$	$F(1,15) = 5.31$, $p < 0.05$, $\eta p^2 = 0.27$ Covariate: $p = 0.08$	$F(1,15) = 4.76$, $p < 0.05$, $\eta p^2 = 0.26$ Covariate: $p = 0.80$
In *Tools* classes only, comparing improvement in reading over the kindergarten year by lower-income children vs. those more economically advantaged.			
Improvement in Reading: Lower vs. Higher SES; *Tools* classes only	n/a	$\chi^2(1, N = 9) = 4.17$, $p = 0.12$ [NS], odds ratio = 2.05 Covariate: $p = 0.63$	$\chi^2(1, N = 9) = 4.28$, $p = 0.11$ [NS], odds ratio = 2.11 Covariate: $p = 0.26$
In *Tools* classes only, comparing improvement in reading over the kindergarten year by how far along the children were in reading in September (regression of change in reading level on initial reading level)*			
Improvement in Reading by Initial Reading Level; *Tools* only	$F(2,6) = 18.18$, $p < 0.005$, $R^2 = 0.89$ Covariate: $p = 0.72$	$F(2,6) = 11.61$, $p < 0.01$, $R^2 = 0.80$ Covariate: $p = 0.62$	$F(2,6) = 11.64$, $p < 0.01$, $R^2 = 0.80$ Covariate: $p = 0.38$
Comparing children's improvement in writing over the kindergarten year in *Tools* classes vs. in Control classes			
Improvement in Writing	$\chi^2(1, N = 18) = 20.20$, $p < 0.001$, odds ratio = 26.18 Covariate: $p = 0.25$	$\chi^2(1, N = 18) = 19.90$, $p < 0.001$, odds ratio = 26.01 Covariate: $p = 0.32$	$\chi^2(1, N = 18) = 19.05$, $p < 0.001$, odds ratio = 25.50 Covariate: $p = 0.87$
Comparing the percentage of children able to write a sentence or consecutive ones they themselves composed with most sounds represented in *Tools* classes vs. in Controls classes			

% able to write an original sentence or consecutive ones	F(1,15) = 18.10, p < 0.001, ηp² = 0.55 Covariate: p = 0.47	F(1,15) = 18.24, p < 0.001, ηp² = 0.55 Covariate: p = 0.29	F(1,15) = 16.43, p < 0.001, ηp² = 0.52 Covariate: p = 0.98
Comparing the percentage of children able to write $\geq$ 1 sentences they composed with most sounds represented in classes taught by the teachers assigned to *Tools* in the year before Tools was implemented vs. Year 1 of *Tools*			
% able to write $\geq$ 1 original sentences the year before *Tools* vs. Yr 1 of *Tools* (same teachers both years)	χ²(1, N = 8) = 13.54, p < 0.01, odds ratio = 9.42 (Data were available for 8 of the 9 Tools teachers because for one *Tools* teacher, Year 1 of *Tools* was her first year teaching. Data on subsidized-lunch and ESL status were not available for the pre-*Tools* year at the class level. Teacher's years of experience was completely confounded with pre-*Tools* year versus Year 1 of *Tools* in this within-teacher comparison.)		
In *Tools* classes only, comparing improvement in writing over the kindergarten year by lower-income children vs. those more economically advantaged.			
Improvement in Writing: Lower vs. Higher SES; *Tools* classes only	n/a	χ²[1, N = 9] = 3.37, p = 0.17 [NS] odds ratio = 1.83 Covariate: p = 0.25	χ²[1, N = 9] = 2.66, p > 0.20 [NS] odds ratio = 1.24 Covariate: p = 0.83
Comparing children's improvement in math over the kindergarten year in *Tools* classes vs. in Control classes			
Improvement in Math	χ²(1, N = 18) = 2.50, p = 0.11 [NS], odds ratio = 1.56 Covariate: p = 0.45	χ²(1, N = 18) = 2.54, p = 0.11 [NS], odds ratio = 1.56 Covariate: p = 0.42	χ²(1, N = 18) = 1.50, p > 0.20 [NS], odds ratio = 1.12 Covariate: p = 0.64
Comparing the percentage of children in May who could do no better than count up to 20 objects			
% able to do no better than count up to 20 objects	F(1,15) = 3.16, p = 0.10 [NS], ηp² = 0.17 Covariate: p = 0.39	F(1,15) = 2.68, p = 0.12 [NS], ηp² = 0.15 Covariate: p = 0.59	F(1,15) = 2.62, p = 0.13 [NS], ηp² = 0.03 Covariate: p = 0.49
Comparing the percentage of children in May who could do simple subtraction in *Tools* classes vs. in Control classes			
% able to do simple subtraction	F(1,15) = 1.77, p = 0.20 [NS], ηp² = 0.11 Covariate: p = 0.56	F(1,15) = 1.94, p = 0.18 [NS], ηp² = 0.11 Covariate: p = 0.47	F(1,15) = 1.88, p = 0.19 [NS], ηp² = 0.11 Covariate: p = 0.46
Comparing the percentage of children in May reported to be having problems interacting with other children in *Tools* vs. Control classes			
Problems interacting with other children	F(1,15) = 6.83, p < 0.02, ηp² = 0.31 Covariate: p = 0.51	F(1,15) = 6.37, p = 0.02, ηp² = 0.30 Covariate: p = 0.59	F(1,15) = 6.06, p = 0.02, ηp² = 0.29 Covariate: p = 0.99
Comparing the change from Sept. to May in the percentage of children reported to be having problems interacting with other children in *Tools* vs. Control classes			
Change in % having problems interacting with other children	F(1,15) = 20.59, p < 0.001, partial eta squared = 0.58 Covariate: p=0.007	F(1,15) = 15.81, p < 0.001, partial eta squared = 0.51 Covariate: p=0.004	F(1,15) = 15.13, p < 0.001, partial eta squared = 0.50 Covariate: p=0.06

Comparing whether or not the teacher noticed any cliques in May in *Tools* classes vs. in Control classes			
Presence of ≥ 1 Clique	χ²(1, N = 18) = 11.99, p < 0.001, odds ratio = 15.77 Covariate: p < 0.001	χ²(1, N = 18) = 6.48, p < 0.01, odds ratio = 7.72 Covariate: p = 0.35	χ²(1, N = 18) = 6.01, p = 0.01, odds ratio = 7.11 Covariate: p = 0.60
Comparing whether or not the teacher noticed any child who tended to be ostracized or left out in *Tools* vs. Control classes in May			
Presence of ≥ 1 ostra-cized or left-out child	χ²(1, N = 18) = 4.87, p = 0.02, odds ratio = 3.45 Covariate: p = 0.53	χ²(1, N = 18) = 6.63, p < 0.01, odds ratio = 8.30 Covariate: p = 0.53	χ²(1, N = 18) = 3.21, p = 0.07 [NS], odds ratio = 2.2 Covariate: p = 0.64
Comparing whether or not the teacher reported students were good at getting back to work after recess and weekends in *Tools* classes vs. in Control classes in May			
Getting back to work after recess and weekends	χ²(1, N = 18) = 5.31, p < 0.02, odds ratio = 5.28 Covariate: p = 0.46	χ²(1, N = 18) = 5.04, p = 0.02, odds ratio = 5.04 Covariate: p = 0.42	χ²(1, N = 18) = 6.69, p < 0.01, odds ratio = 8.39 Covariate: p = 0.13
Comparing whether the teacher reported students had been good at getting back to work after Spring break in *Tools* vs. Control classes			
Ability to get back to work after Spr. break	χ²(1, N = 18) = 4.92, p = 0.02, odds ratio = 3.50 Covariate: p = 0.13	χ²(1, N = 18) = 4.33, p < 0.03, odds ratio = 3.05 Covariate: p = 0.61	χ²(1, N = 18) = 3.81, p = 0.05, odds ratio = 2.6 Covariate: p = 0.90
Comparing # of minutes teachers reported their students could be left to work on their own, unsupervised, in *Tools* vs. Control classes in May			
# of minutes could work unsupervised	F(1,15) = 11.43, p < 0.005, ηp² = 0.43 Covariate: p = 0.76	F(1,15) = 14.98, p < 0.005, ηp² = 0.50 Covariate: p = 0.04	F(1,15) = 12.96, p < 0.005, ηp² = 0.46 Covariate: p=0.32
Comparing *Tools* and control teachers' excitement about teaching in May. (Because the distributions were so skewed, we compared the % endorsing choices 1 or 2 (excited about teaching, energized) to the % endorsing any other choice on the 10-point scale.)			
Teachers' excitement about teaching in May	χ²(1, N = 18) = 4.99, p = 0.02, odds ratio = 3.58 Covariate: p = 0.71	χ²(1, N = 18) = 4.29, p < 0.03, odds ratio = 3.00 Covariate: p = 0.27	χ²(1, N = 18) = 4.26, p < 0.03, odds ratio = 3.00 Covariate: p = 0.37
Comparing *Tools* and control teachers' enthusiasm in looking forward to the next school year. (Because the distributions were so skewed, we compared the % endorsing choices 1 or 2 (extremely enthused) to the % endorsing any other choice on the 10-point scale.)			
Teachers' enthusi-asm looking forward to the next school yr	χ²(1, N = 18) = 5.67, p < 0.02, odds ratio = 5.86 Covariate: p = 0.73	χ²(1, N = 18) = 7.71, p < 0.01, odds ratio = 10.86 Covariate: p = 0.25	χ²(1, N = 18) = 5.67, p < 0.02, odds ratio = 5.86 Covariate: p = 0.02

* We would have done a similar analysis for writing and for math but there was too little variation between children in the Fall levels of writing or math competence.

Gray font indicates non-significant results.

ηp² = partial eta squared

χ² indicates a generalized estimating equation analysis was used, from which a chi square was generated.

S5 - Comments by Teachers, Parents, and Principals

The topics covered here are:

> **General**
>
> **Reading**
>
> **Vocabulary and Oral Language**
>
> **Writing**
>
> **Math**
>
> **Getting Along Together; Lack of Fighting and Social Exclusion**
>
> **Children Helping and Supporting One Another**
>
> **Sense of Community in the Classroom**
>
> **Ability to Work Independently**
>
> **Self-Regulation / Attention Regulation**
>
> **Joy in Learning and Enjoyment of School**
>
> **Teachers' Feelings about Teaching**

General Comments

Tools teachers

"I see the positive outcomes for my students in all aspects of their learning! This really is making a difference!"

Control-group teachers

Parents

Parent #1: "I cannot speak highly enough of the Tools of the Mind program. My son has developed and matured so profoundly since the beginning of the school year that is difficult to summarize in a few sentences.

I have watched him become excited and continually interested about learning everything. He began the year with little interest in reading or imaginative play. Now he tells his father and I a chapter in his 'story' (a book he is writing in his head) every night. He guides his 3 year old sister and friends outside of school in imaginative play and storytelling. He wants to read chapter books and is determined to finish reading/hearing the Treehouse series of books. He has come home and asked to do 'homework', taking time each day to practice his skills by doing mazes, coloring, working on letters or trying math. All this is self-directed. At the beginning of the year it was difficult to even get him to sit for 5 minutes to color a page and now he readily takes responsibility for himself and his actions.

This program has gone a long way towards instilling my child with exceptional abilities that will take him through life inside and outside of school. As a mom I have the best intentions of working on my children's learning outside of school but in this busy ol' world reality and intention don't always work together. I have found that the way my son is taking control of himself has made it much easier to create support for him at home. It discourages helicopter parenting in the best possible way. At 5 years old I see skills growing in him that I sadly find missing in people 15 or more years his senior. This is a wonderful program and the effects have been profound and astounding in our lives. I sincerely hope that, when the time comes, I will be able to have my daughter in the Tools of the Mind program so that she will have the same significant start in school and learning as my son."

Parent #2: "Below are some thoughts on Tools of the Mind. How do you sum up such a great program in a few words??? I am writing as a parent of a Kindergarten student who is part of the Tools of the Mind Program. I have also had the opportunity to volunteer regularly in the classroom and observe the progress that the children are making. Without exception, the children in the class have enthusiastically embraced each of the different themes presented and have eagerly anticipated each new book being introduced. Their enthusiasm for the materials has carried over to their play centres in the classroom where they have used the themes effectively in their free play.

I have observed students incorporating writing into their play centres through the use of white boards and notebooks. Writing is not a chore for them but something that they embrace and incorporate as part of their free play. They also use the themes for dramatic play outside at recess. All of this is student-led with roles and characters being discussed and negotiated as they leave the classroom on their way outside. Their written and verbal literacy skills have improved a great deal since the beginning of the year but so has their ability to negotiate and find solutions to problems without the need for an adult to assist. They are able to recognize their differences, accept them and find a solution where required.

In terms of my own child's progress, it is wonderful to see how he embraces learning and looks forward to being in the class each day. Learning to read has been a fast and painless process as he is able to sound out letters and figure word sounds out on his own for the most part. It has required very little parental input and it is amazing to see him reading full books when he was just beginning to sound out three letter words at the beginning of the year. His written sentences are legible, appropriate to the context and his oral story telling abilities are astounding."

Parent #3: "My child has had the privilege of attending a Tools of the Mind Kindergarten class this year. As a parent and educator, I have observed such wonderful social, emotional and intellectual growth within my child's development. As a parent, I have observed [my child's]:

* **willingness to take risks and try new things** as a learner flourish
* increasing **ability to focus** for longer periods of time on more challenging tasks
* **excitement for reading** grow. She not only loves listening to stories, but has recently been bitten by the "reading bug." [My child] will spend her free time independently reading simple patterned stories without any encouragement from adults.
* **confidence grow as a developing writer.** She confidently prints letter sounds, draws detailed pictures and enthusiastically shares her stories with her family. She considers herself a writer.
* **enthusiasm towards school.** She always has a story to share about her day and is always excited about going to school.
* **sense of belonging and relationships grow between her and her classmates.** [My child] often talks about the children she has worked with within her group and has become acquainted with **all** of the children within her class. She often shares stories about a variety of children she plays with at school.

Above all, I have noticed [my child's] excitement for learning and her inquisitive nature continue to develop. As a family, we all love listening to her share her stories "Mommy, Daddy, and Megan did you know that…"

My older son had the same teacher last year before the Tools of the Mind program was introduced. I sometimes find it hard to believe it is the same classroom with the same teacher as the entire feel of the class has changed. She is still the same amazing teacher as before but the students have so much more self control. They take an active role in the classroom and in their learning and are able to self regulate to a degree that adult intervention is rarely required."

Parent #4: "My daughter rushes out of school full of excitement about Jack and Annie [characters in the storybooks they have been reading], what they're doing, what will happen next, and she details for me all that she's learning [in Tools of the Mind].

Right up until Spring Break, the children were regularly playing "Jack and Annie" outside the classroom; at lunch, after school, on playdates. I also think they connected socially on a different level because of the activities in the classroom. She's happily playing with kids that she wouldn't have played with last year, and their play feels free

to me. Their play is wonderfully creative. In the fall, many of the girls (and some of the boys) engaged in an ongoing imaginative game about "turtle island" where they used the sandy playground to draw out a hotel ("turtle hotel") with rooms for each, and a track (for [my daughter] to run), and a kitchen. The game went on for weeks and was more creative and generative than I've really ever seen on the playground before.

The integration of fictional characters with factual information has really expanded her range of interests. She pursues additional knowledge in areas that really pique her interest. She brought home library books about the rainforest and animals you would find there when they were doing the rainforest book [remember she is in Kindergarten!], and she continuously makes connections between what we might be doing in our day and what she's learned at school. Our family really enjoys fiction, so I like seeing that her comfort with different genres of books has also increased.

The quality of the children's art is surprising in that all children are really producing amazing work—detailed and bright—perhaps because much of the art is linked to the learning that excites them. My daughter not only wanted me to admire the mummy's mask she made, but she wanted to explain to me what it was and all the death rituals of ancient Egyptians. The effort and time she and a friend put into a dragon (for Chinese New Year) and on figuring out how to draw a horse for a farm was inspiring. They started the work in school, but brought it home to finish—again, so excited and inspired by what they are doing and exposed too.

I also credit the program with encouraging her to challenge herself. She's clearly inspired by what she can find in books and happily picks up books beyond her year level. What's interesting to watch is that she is applying strategies she's learned, and it's expanding her capacity. It's not that I feel any desire for her to be reading above grade-level. The point is that she sees learning as something accessible to her. She's excited to learn and doesn't identify barriers; she just tries to overcome them.

This program has made me realize that our standards, or expectations, for what children can achieve are limiting and restrictive. In an environment that creates excitement AND skill development, children willingly investigate concepts and learn. My daughter has at least. In my opinion, she is exploring knowledge for its own sake, uncovering and engaging with ideas, and enjoying herself. Yes, she's working, but it's so joyful that I just wish she could keep going in this kind of approach throughout her K-3 schooling."

Principals

"[The Tools teacher in my school] is a very experienced, extremely talented teacher. For her to say Tools is making a difference for kids is quite something because everything she does makes a difference. She has some new "tools" and is telling me she is getting better results than ever before."

The 2 Coaches of *Tools of the Mind* teachers

"Working with the Tools of the Mind teachers has been a joy. It is amazing to see teachers who were hesitant at first to take on an extensive program gain momentum the more they learned about Tools and the more they saw results in their classrooms. Teachers tell us over and over that they are amazed at what their children have accomplished and how the program is so seamlessly interconnected in math, science, art and language. It creates a learning context familiar to the children where they can explore academics rather than receive knowledge from the top down. As the year has progressed, teacher's enthusiasm has grown with their knowledge of the program and the capability of the children."

Comments on READING
(A few comments are partially repeated under Writing, as they apply to both.)

Tools teachers

"The literacy level in the classroom this year is much higher [than in past years]. We are a new Early Intervention

school so our resource teacher evaluates all the Kindergarten children. In January, no one in my classroom was at risk. That has never happened before. Children who had qualified for ELL [English Language Learner] support at the beginning of the year, no longer qualified in January. That has never happened before. In past years some children were always at risk."

"I have never had a whole class that was reading by May until I did the Tools program. Students are reading many sight words and are able to use all of the strategies for reading that we practice everyday.

"Students are not only able to read (for the most part) but they enjoy it and WANT to do it!!! They also feel such a great sense of pride being able to do it."

"Only 6 children in my class are NOT reading this year. In past years I was lucky to have 6 kids who *were* reading.   As of Feb, I had 17/22 students reading at a DRA Level 3, including ELL students – exceeding expectations. As of April, the majority of my students are reading at a DRA Level 6 or above, fully meeting criteria for the first term of Grade 1."

"Normally I only get to A level books with most students (possibly a few to B) but this year I have students reading A-C levels so far."

"Much higher levels of reading and writing for every child [than in past years]. Opportunities for those children who come to school with knowing how to read and write to continue to grow."

"Starting to read in kindergarten is so amazing!!"

"Much higher levels of reading and writing for every child. Opportunities for those children who come to school knowing how to read and write to continue to grow."

Control-group teachers

"The majority of my class know all their letters and sounds. Some are beginning to sound out words. I have four students who are able to read some sight words. I have four students who do not yet know their letters and sounds."

"This year I observe that there are more readers in the classroom than in past years. A lot of work has been done in the area of literacy development. Reading is one of the school goals and this year is the first year our school has received early intervention funding/support."

"Most children can recognize many word families and some sight words, though they can't read a book. I also directly teach phonemic awareness, and administer the ELPATS (a phonemic awareness assessment) and about 80% are not at risk."

Parents of children in *Tools of the Mind*

"Since the beginning of the school year I have noticed a huge change in my son's confidence in reading words. He also writes sentences at home and can explain concepts."

"This is my first experience with a child in Kindergarden so I was not sure what to expect for [our second child] this year. I have been so impressed with what he has achieved. He can sound out and recognize words with increasing frequency; I didn't expect him to be so close to reading at this stage."

"Learning to read has been a fast and painless process as he is able to sound out letters and figure word sounds out on his own for the most part. It has required very little parental input and it is amazing to see him reading full books when he was just beginning to sound out three letter words at the beginning of the year."

"I credit the program with encouraging her to challenge herself. She's clearly inspired by what she can find in books and happily picks up books beyond her year level. What's interesting to watch is that she is applying strategies she's learned, and it's expanding her capacity. It's not that I feel any desire for her to be reading above grade level. The point is that she sees learning as something accessible to her. She's excited to learn and doesn't identify barriers; she just tries to overcome them."

Coach of *Tools of the Mind* teachers

"This method of teaching writing has enabled the children to understand how words and sounds function and they have naturally moved into reading. With the emphasis on helping children learn to write, we see many more children able to read and write….The program accommodates students of all levels so they are stretched whatever their ability."

One of the two creators of *Tools of the Mind*

"It is really, really exciting that we got high literacy scores without pushing but 'following the children's lead' so that children were taught skills when we knew they were ready for them. This shows that teaching reading in a developmentally appropriate way that is responsive to the children can get the same or better results. At no point were children forced to read – and Tools teachers never did phonics drills. I think it is important that these literacy gains are _completely_ without teacher-led drills on letters or sounds."

Comments on VOCABULARY and ORAL LANGUAGE

Tools teachers

"All the students are speaking with far richer vocabulary with each other now than at the beginning of the year.

"It is amazing to see how much oral language is being used on a daily basis. They are quick to experiment with new vocabulary. They love to talk and interact with each other as they play, as they eat, and as they work."

"Children use rich, theme-related vocabulary in proper context. They also extend this language out on the playground, and in other discussions. They make many connections with various texts and real world situations."

"The language in our classroom is very rich! They love having discussions about the topics we are learning about and the students are so excited about the topics that they go home and do even more research. Plus students are always surprising me with connections they have made between topics and books we have already read in class.

"There is lots of conversation which is on topic and connected to our themes."

 "I see more conversations and negotiating with each other."

"Children use oral language skills to solve their problems. They use the vocabulary in their dramatization. And it is amazing to see how much oral language is being used on a daily basis. They are quick to experiment with new vocabulary. They love to talk and interact with each other as a play, as they eat, and as they work."

 "They are able to articulate what they are working on and know how to get there."

Control-group teachers

"Their phonemic skills have increased immensely, and their oral language has increased as well (especially in social play). I mostly notice them using vocabulary from the science texts we read."

"Most of my students have excellent verbal skills."

Comments on WRITING
(A few comments are partially provided above under Reading, as they apply to both.)

Tools teachers

"The writing my students produce is personal and meaningful. Even days later they can re-tell what they have written. This had never occurred in any of my kindergarten classes before….The children's writing is constantly

improving and they strive to write more. They want to write, they want to be heard, and they transfer this skill set in to other areas of their lives."

"Writing growth is profound. My ESL resource teacher has never seen such growth of Kindergarten students in her entire teaching career. (She is close to retirement.) Every child is excited to write – even the weaker students who are happy to ask for help."

"In my classroom 20/22 children are able to write at least beginning sounds to represent what they have written and are able to remember and re-read what they have written even days later. In previous years, only a few of my students could write a message and be able to re-read what they had written even on the same day."

"Writing has come so far in the majority of students. They are not restrained by a frame or inability to write a word, they can get a message in their mind, remember it, write lines to represent and add letters/sounds. They can write what they want and they can (with big vocabulary words and detail) – it is empowering for them!... This is the first time in my 6 years as a primary teacher that 17/20 of my students are meeting or exceeding grade level expectations for writing. I have students writing and sustaining focus… the program has really helped learners who would have struggled much more."

"Amazing writing development. Some kindergarten children are writing up to 3 sentences (some even more) which is very exciting. My students are now confident writers."

"Writing like I've never seen before! I have 2/3 of my class writing meaningful sentences – 1/3 of those are actually writing multiple sentences. The remaining 1/3, who are not yet writing sentences, understand the process of writing and are beginning to fill their lines with initial and end sounds."

"The literacy level in the classroom this year is much higher. We are a new Early Intervention school …. This year I find that every child in my class can write a sentence by themselves. More children than ever before are able to write more than expected. It has been very rewarding and exciting to see. It is also exciting to read chapter books to the students. The topics in the books really make learning exciting for the students. There is rarely anyone who complains that they don't know what to write. Compared to previous years in which students had a lot of trouble thinking of ideas to write and it was like pulling teeth to get them excited for writing time. At this time of the year, I have never [in 20 years of teaching] seen such growth in writing nor as many students exceeding writing expectations. Never dreamt I`d see kindergarten children writing full sentences, much less most of the children doing so."

"This year I have a greater % of students writing and wanting to write. Their output is meaningful and it shows them using their "tools" as a writer and a learner. This of course has transferred into an ability for and desire to read – I am so confident in the students I am sending to Grade one! ☺"

"Much higher levels of reading and writing for every child [than in past years]. Opportunities for those children who come to school knowing how to read and write to continue to grow. Even the lowest child who is a beginner ELL student has shown growth in being able to formulate a message that has something to do with what we have been reading and a picture to go with his writing."

"I am extremely impressed with all of our kids' ability to write. We are an inner-city school with many (almost half) at-risk. Our lowest-performing child (who is awaiting a Ministry designation) who was unable to orally put a sentence together was able to tell me yesterday that "the" is spelled "T-H-E". This is HUGE!"

"The students' writing and reading is amazing! An LST [Learning Support Teacher] came to look at one of my lower students' written output. When she saw his writing she wondered why I had concerns. So I showed her the work from other students, including my ELL students and an English language learner with speech issues; she was amazed at how well and fast the entire class was progressing and quickly realized why I had concerns."

"I have enjoyed seeing the enormous progress my students have made in writing and reading. I have never had so many students writing 2 or 3 sentences by the end of Kindergarten. And all of my students are able to write at least one sentence independently with most of the sounds."

Control-group teachers (only one commented on writing)

"Writing has been a focus area and I observe a higher number of children engaging in some form of writing independently."

Resource teacher

"I am amazed at the quality and level of writing in the Tools kindergarten class I have been servicing. The sound maps are amazing!!! Because I service all 3 kindergarten classes in our school I am well aware of the differences in each class in terms of writing."

Parent of a child in *Tools of the Mind*

"Writing is not a chore for them but something that they embrace and incorporate as part of their free play."

Principals

"The writing that comes out of the Kindergarteners in Tools is amazing."

"I have noticed in our Tools class that all the children are so focused on their writing during journal time. They are very 'engaged' in their writing."

The 2 coaches of *Tools of the Mind* teachers

"We have observed that "Scaffolded Writing," the unique way writing is taught to the kindergarten children in the Tools classrooms, is having a very positive effect on their progress in this area. Most children were not writing in September but by May all but a few are. There are a number who can write two to three sentences on their own using complex sentence structure, sophisticated vocabulary and conventional spelling. There are only a handful of students in each class who are at the beginning stages of writing only the beginning sounds. These results are consistent across all socio-economic areas. We have never seen such advanced writing in Kindergarten before."

Comments on MATH

Tools teachers

"Students this year understand the concepts behind the math. It has given them a solid foundation to build upon."

"Students have asked to play math games from class at home."

"The games are engaging and the students are able to 'play' independently and they are developing key early numeracy skills. There are so many activities interwoven through the days in a variety of ways. My students love the various pattern activities with sounds and movements."

"Children are counting with increased confidence forwards and backwards."

"I'm not sure if the math is any different as a result of this program."

Control-group teachers

"I really appreciated the proD from the summer--I have used the concepts I learned in the math workshop throughout the year and it has helped immensely."

"I feel this year I have really improved in my numeracy teaching (thank you for the Math ProD workshop) and the children have a stronger number sense than in previous years."

Comments re: GETTING ALONG TOGETHER; LACK OF FIGHTING and SOCIAL EXCLUSION

Tools teachers

"There have been less issues that have come to my attention from the lunch supervisors [this year] because my students have a plan before they go out to the play. I will often hear them say things like, 'Let's play hospital. I'm the ambulance driver. You can be the sick person.' My students seem to be much better at negotiating with each other."

"The students are speaking to each other more, independently able to work through disagreements and solve problems with their peers through compromise and negotiation….They are willing to work and help any peer in the classroom. There are able to solve disagreements quite independently and there is way less tattling behaviours that used to take up a great deal of class time after recess and lunch breaks."

"I notice of course the children's preferences for friends to play with and sometimes small conflicts arise. However, this year I have been very impressed with students' abilities to work with everyone in their different groupings and I notice how supportive they are of each other."

"More willingness to interact with anyone this year. Every student is willing to work/play with any peer in the classroom vs. previous years when there were 'popular' vs. 'unpopular' problems and kids who didn't fit in."

"I have NO refusals to work with each other (regardless of ability, gender, age, culture, special needs). That would have been unheard of in past years."

"No one makes faces or puts up a fight when I partner students together. They seem more accepting of working with everyone in the classroom [than in past years]."

"Students' understanding and practice of social 'rules' is much improved. They take Tools into free play. I have had students ask me if they can remove themselves from the classroom to discuss their problem and come to a solution. Then they come back to me and tell me that they have fixed the problem. This is amazing!"

"I love hearing the children using the dispute bag to figure out who goes first and many of the skills that have been taught. They independently use these skills and don't often have to be reminded by the teacher. They are quick to share with others, those who may be new to our classroom, on the rules and expectations of our classroom. They 'help' the visitors follow our classroom rules.   One of the class' favorite themes was the theme of Ninjas. The other kindergarten teacher asked me if my children were fighting outside on the playground at recess because of the ninjas. I said no. The children knew that the ninjas were in control of their bodies and that's what they wanted to do as well."

"I love the positive social interactions I see between the students. Students are able to work together with peers more effectively; there are less conflicts within the classroom between students. The students are willing to try new centres and choose to work with a variety of peers during free play."

"Students are more willing to work out disagreements and make compromises as well as help peers who need help. Students are willing to share their feelings more openly in a group setting and work together to find solutions and willing to revisit if it doesn't work and try something new. They are able to negotiate tasks and do it fairly."

Control-group teachers

"I still have children [in May] who have difficulty interacting. The kinds of negative interactions I see are: Mean statements -withholding of items or information (not sharing) - hitting, grabbing, pushing - name calling - bossy - not including others in play - refusal to be paired up with a child - taking something from someone else - defiance towards the teacher or another child - teasing - running away from a peer who wants to join in the play - laughing at another's expense - purposely bothering another (i.e. rubbing their head, taking their shoe away)."

"At this point [early May], social blackmailing continues to be an issue, as well as hitting (between the same girls who have social difficulties)."

"I find that since we have come back from spring break my students behaviour has regressed. At the beginning

of the year they didn't know 'the rules', and now they seem to have forgotten all about them again!!   I am having to constantly monitor behaviour and 'put out fires'. Maybe I'm just too tired and its affecting my perspective on things!... I think that it is ridiculous that I have to send my kindergarten students out on a poorly supervised playground with 400 other students. I feel that this has resulted in increased behaviour issues both in and out of the classroom."

"Sadly, although there have been improvements, I would have to say I still have 9 children who are having difficulty interacting (e.g., refusal to share, tantrums). The physical aspects towards others have been reduced (e.g., less hitting, slapping, kicking, stealing, throwing furniture, breaking classroom supplies, hair pulling, etc.)"

"At the beginning of the year, the students needed a lot of help problem solving, and playing with more than one friend. Now students are needing less prompting when expressing their feelings to friends. They still need lots of help to negotiate play."

"The classroom is quite diverse….4 children have great difficulty self-regulating and controlling their actions/impulses and or behaviour."

"I would stay that many more than 5 of my students who have difficulty interacting - defiance towards adults, physical agression towards adults, fighting (both physically and verbally), name calling, taking something from other children, taking things from the teacher/classroom, refusing to be paired with another child either for work or play, and many other negative behaviours….Although as I mentioned, I have many students with behaviour challenges, I have many well-adjusted, thoughtful and ready to learn students in my class this year."

"At this time in the year [May] many students need mediated support to be respectful of one another's differences, to include others in their play, to advocate for their needs and to respect their peers' needs."

"Still see some defiance toward teacher and SSW, and hitting of other children."

"I am very interested in helping students to master their ability to self-regulate their thoughts, actions and behaviours and in supporting them to become kind, generous, and considerate people who have an awareness of their needs and the needs of others. I am also very interested in how to help students to realize their strengths and to use their strengths to work on areas of challenge in both themselves and others. The pace of my Kindergarteners' day is VERY fast and I would love to slow this down and give more time to self-reflection, contemplation, drawing, singing, and experiencing beauty and wonder and enjoyment of the outdoors. I am interested in setting up my classroom and programming in a proactive and thoughtful way that honours children's need to play and their need to learn how to 'be' within the context of a group."

Comments re: CHILDREN HELPING AND SUPPORTING ONE ANOTHER

Tools teachers

"The students in my class get along with each other. They may have a preference for a child they would like to play with. However, it is usually because the child is interested in the same activity. Boys and girls play together, boys play with boys and girls play with girls. It is a mixed but close community. I am told about a child being hurt on the playground by a number of children. In years past, they have not helped each other to this degree, when a child was hurt but now have witnessed many students going to another students' aid. I see our classroom has a warm and accepting place. One mother, the mother of the student with extreme anxiety, went to the principal near the winter holiday time to tell the principal how much her daughter loved her teacher. The mother then came to me saying how thankful she was, as every day in China, her daughter did not want to go to school and now wanted to go to school (even when sick). The mother was extremely happy that her child felt safe and loved in our community."

"They offer help and assistance when needed without being asked and without belittling the struggling student. They look out for one another and ensure everyone has someone to play with or talk to….This behaviour even spills out to the outside playground."

Everyone plays and learns with all students. All of my students celebrate the efforts and successes of each child – regardless of ability. They also offer help and assistance when need without being asked or without belittling the struggling student. They look out for one another and ensure everyone has someone to play with or talk to… This

behaviour even spills out to the outside playground – it is truly AMAZING!

"I think the majority of students in my class are able to get alone with one another very well. They love to help and support each other and they are very kind and considerate to each other's feelings. The Tools program has really helped them feel comfortable working with other students in the class because they know that they will be working with different students each week. I also think the way the Tools program incorporates roles and responsibilities helps the students to accept their role or job in their group and there is no arguing over who has to do what job."

Students work willingly to help their peers during our day. When a new student joined our class with severe behavioural issues they were very accepting and tried to help this student integrate into our classroom routines.

They are much better at helping each other and they take their role as a buddy checker seriously. They like to make sure their buddy completed their work.

"Socially I have noticed that the students this year are more comfortable working with other students in the classroom.

"My students this year are very inclusive and are able to work with anyone in the classroom. Strong bonds between individual children and between all children. Children who may not have previously played with each other do."

"Students are now able to support each other without teacher involvement which is different from previous years."

"Students not comparing themselves to each other academically. They are cheering each other's success, are more supportive of each other."

Control-group teachers

"They tend to get along pretty well at this point in the year; we have some strong leaders who are 'friends with everyone' who, when they are present, are a very positive influence (will remind about appropriate social skills and behavior, 'you need to apologize for that', 'we don't do that here', etc). We also have a few children who have a very difficult time acting kind most of the time. This makes it difficult to have a totally close knit community, as these children, while they have progressed, still need significant support to make choices that benefit everyone and not just themselves."

"At this time in the year many students need mediated support to be respectful of one another's differences, to include other's in their play to advocate for their needs and to respect their peer's needs."

"Most challenging this year has been the lack of an established and harmonious classroom community where kindness, consideration and care are the norm….The students are learning to read and write, but their ability to be well-adjusted and considerate human being lags behind."

Comments re: SENSE OF COMMUNITY IN THE CLASSROOM

Tools teachers

"My students this year have a strong sense of community – in fact we are a strong-knit FAMILY. Everyone works, plays, and helps EVERYONE – without any moaning and groaning. They are far more adaptable, flexible and accepting of everyone regardless of appearance or ability."

"More of a sense of community [this year]. I see children helping each other and looking after each other to a greater degree from in the classroom to out on the playground at recess [than in past years]."

"We have a very strong sense of community. Students are quick to check on each other, if one is crying or angry, and show concern for a peer who is hurt. This I see more often than not."

"They have a strong sense of community *sense of community.*

"Student peer relationships are fantastic – know, play, and work with EVERYONE. Real sense of community/family."

"We are a tight-knit FAMILY. Have enjoyed seeing the kids working together so that all are successful."

"Last 2 years have been very trying with the student's social/emotional learning. There was very little self-regulation. This year with Tools there has been tremendous growth. They are better able to self-regulate their behaviour and be more patient, kind and inclusive."

Control-group teachers

"Their ability to work cohesively as a community or as a team is inconsistent from day to day and there are many days [even now in May] where the children's energy is 'scattered' and they seem to march to the beat of their own drum."

"Building a strong sense of community has been a challenge this year. At this time in the year [May]…their ability to work cohesively as a community or as a team is inconsistent from day to day."

Comments on ABILITY TO WORK INDEPENDENTLY

Tools teachers

"I see a big difference in the students now in May compared to September. All the students know the routines and can get to work without much prompting. They know the schedule and can start on the activities without my support."

"Greatest reward is…seeing kids so very proud of what they can do independently."

"Peers help their study buddy remain on task and regulate their behavior in small groups, and they require minimal teacher assistance to solve the minor issues that sometimes arise."

"Greatest reward from using Tools this year is children having more control of their own learning."

"Students at this time of year [May] are much more independent than in past years. They are able to look at the chart, find which group they are in and go to that area without any teacher support. They support each other and use peer regulation."

"Students are now able to support each other without teacher involvement which is different from previous years."

"They are able to articulate what they are working on and know how to get there (practice, help from a study buddy, teacher assistance)."

"I'm so thrilled to have children who can work independently! Many to all of my students are now able to work independently. Parents love the independence of the students."

"One way I've changed the way I've managed my classroom is by empowering my students through planning and activities to manage themselves."

"Children can be independent learners even in kindergarten!!"

Control-group teachers

"This is a very young class (most turned 5 in Oct/Nov/Dec) and in the beginning it was very, very challenging. They are so much better now, BUT we have a strong routine, review expectations frequently....I do feel that many have increased in their self-regulation abilities, but I do still need to play an active role in prompting/ modeling/ affirming behavior. They did not come to school with a great deal of independence, and some still need support in managing belongings, time, and behaviour."

The classroom is quite diverse. There are approximately 5 children who are still unable to work independently.

"At the beginning of the year only a few children were able to work independently. Now only a few ask for help continually without first trying on their own."

"I am continuing to struggle with the children listening to all the instructions when given an activity and then follow the instructions independently. I often have 4-5 children who will ask me what they need to do."

"A major challenge this year has been the range in abilities and motivation in my class."

Comments on SELF-REGULATION / ATTENTION REGULATION

Tools teachers

"In the fall I was really struck by the primal sense of the children – random, impulsive, distractible, emotional, the limitations were tangible. There is no comparison to their behaviour now – the beauty being it is second nature….They still are spontaneous but it's more 'appropriate' and not as 'off the wall'. They get tired and lose focus but it is after thinking hard. In my experience free time tended to be a bit crazy and hard to manage. Here it is not."

"The return to school after Christmas and Spring Break was smooth. Usually each return is like a mini-September – poor self-regulation and adjustment to school. Not this year. It was like the children were returning from a weekend away. In fact, on Mondays, return-to-school has also been much smoother. Very little re-adjustment after a weekend away."

"In 20 years I have never been able to come back from school holidays so seamlessly, with minimal learning lags and still have such great retention of information and routine!"

"We had a child move from very, very little regulation to now being unable to distinguish from peers. This child was very dangerous to others in Sept/Oct."

"At the beginning of the year, my students' ability to self-regulate was very limited. Now they are extremely independent, in-control and able to monitor and regulate themselves.

"Seems like there is more on-task behaviour and when students are off-task they are able to return to tasks easier."

"Many to all of my students are able to work independently. If there changes in the schedule or a full moon, etc., they only need gentle reminders or a quick self-regulation freeze game to come back to what is expected."

"The majority of students are able to regulate themselves better socially and emotionally….They are able to sustain elaborate play scenarios with multiple characters for extended periods of time! They are able to wait for their next turn. The students' growth in self-regulation and their excitement for learning [was the greatest reward of this year]!"

"Children are more independent and regulated. Ones who are not as regulated are regulated by others."

"A TOC [teacher-on-call, i.e., substitute teacher] recently commented how calm my class is."

Comments by *Tools* Teachers on the consequences of this:

"[Because] students are better regulated for sure than in past years, time is freed up for me to work with small groups. I have the freedom to work with small groups and help children learn at their own level; it helps provide students help where they need it and move them further faster. It is definitely more individualized and fits with our new curriculum. Students easily work in small groups and can self-regulate while I work with students who need support."

"They are very self-regulated so I am able to work with a small group without being distracted. This is a wonderful gift."

"The ability of my students to regulate their behaviour and to help those who still require some assistance has allowed me to be able to work with small groups as well as individually with specific students who require additional

assistance. I have never been able to effectively do this ever with kindergarten students before."

"Children are able to concentrate and be involved in activities for extended periods of time. That has made it far easier for me to work with individual students or small groups."

"The class (because of the students' self-regulation abilities) runs smoothly and seamlessly."

"Students are more independent and easier to manage….Management is easier and less stressful."

"At this time in the year [May]…there are many days where the children's energy is 'scattered' and they seem to march to the beat of their own drum."

"In my 3 years of teaching Kindergarten, I have never been able to effectively run small guided reading groups while the other students were engaged & working independently at literacy centres; this year I have been able to!"

Control-group teachers

"What I have enjoyed most is the growth I've seen. They were a MESS at the beginning. I felt like crying every afternoon. So many of them had low basic skills and very little independence, and their was a lot of fighting, crying, and meltdowns. They have come SUCH a long way. When I have been sick or facilitating PALS, every single TOC has said they were a joy to teach, which says to me that they are regulating well when I'm not there. – What has been most challenging has been sustaining my energy through the day. I feel that I need to verbalize much more with this group in terms of modeling appropriate behavior and social interactions. I feel that I need to hydrate and fuel with nutrition similar to the way I do when I am preparing for a long run."

"With the money [the $1,000 we gave each participating teacher for school supplies] I was able to purchase materials to create a softer, more natural atmosphere that would promote calm and would be conducive to self-regulation. Everyone remarks on what a calm, natural, and soothing environment I have in my classroom and I couldn't have made it that way without the funding."

"I've loved watching the children develop both socially and academically. At the beginning of the year, they could barely even sit on the carpet. They are so much better now."

"The classroom is quite diverse. There are… 4 children who have great difficulty self-regulating and controlling their actions/ impulses and or behaviour."

Comments on Children's JOY IN LEARNING and ENJOYMENT OF SCHOOL

Tools teachers

"I have enjoyed seeing the students get so excited about coming to school and learning about the topics/themes we had. They loved all the activities we did so much that many students refused to miss school even if they were sick."

"My greatest reward this year: Seeing the excitement of the students ready to learn and loving coming to school!"

"What I have you liked/ enjoyed most about my class this year is: All the learning that happened through play and dramatization. The smiles and joy. Hearing, "this is the best day, ever!" over and over again. The content parents who are extremely happy with what their children are doing."

"What I liked most about teaching this year: Students' enthusiasm towards learning and their pride in their development."

"What I liked most about teaching this year: The students excitement towards learning."

"The students' growth in self-regulation and their excitement for learning [was the greatest reward of this year]!"

"The students are more excited about learning and more engaged."

"Parents <u>love</u> it! They notice the student's excitement to learn and come to school!"

"The kids have fully bought in. There's no struggle in getting their attention or interest."

"Students are very motivated by subject matter, level of challenge and fun."

Control-group teachers

"I've loved watching the children develop both socially and academically."

"I enjoy my young students excitement and enthusiasm. And they learn so much in such a short time!"

Comments on FEELINGS ABOUT TEACHING

Tools teachers

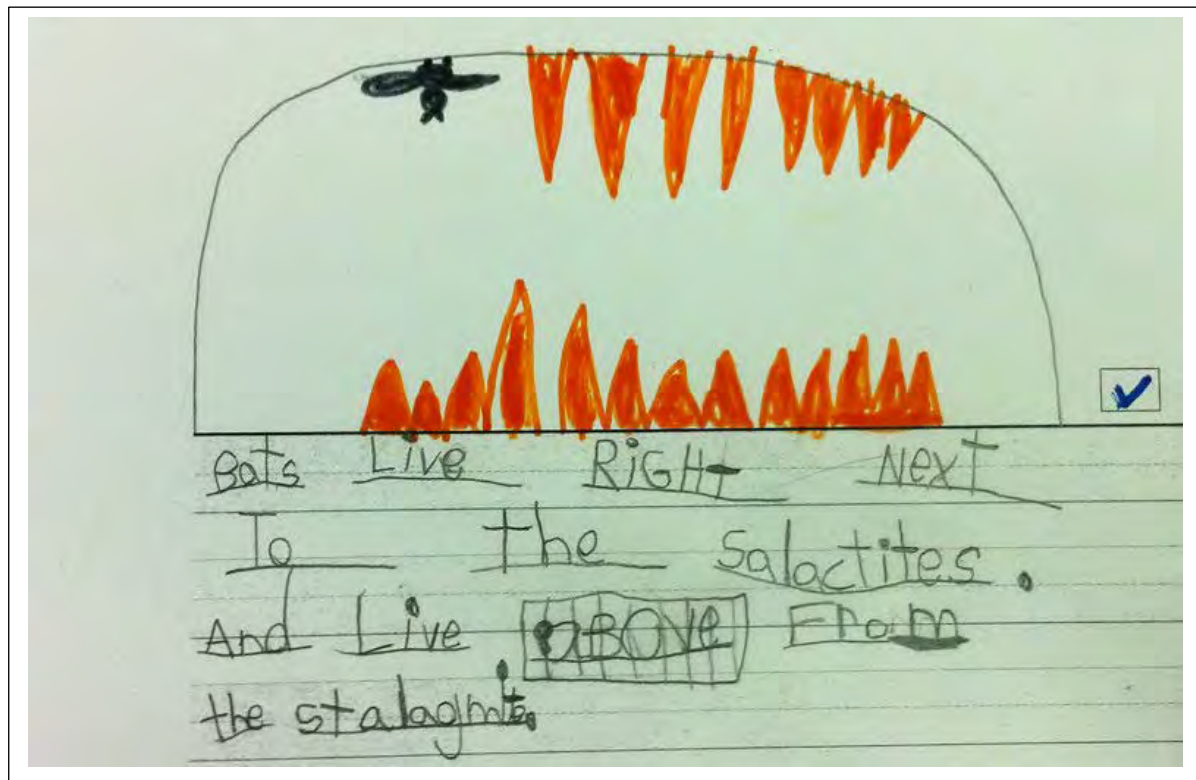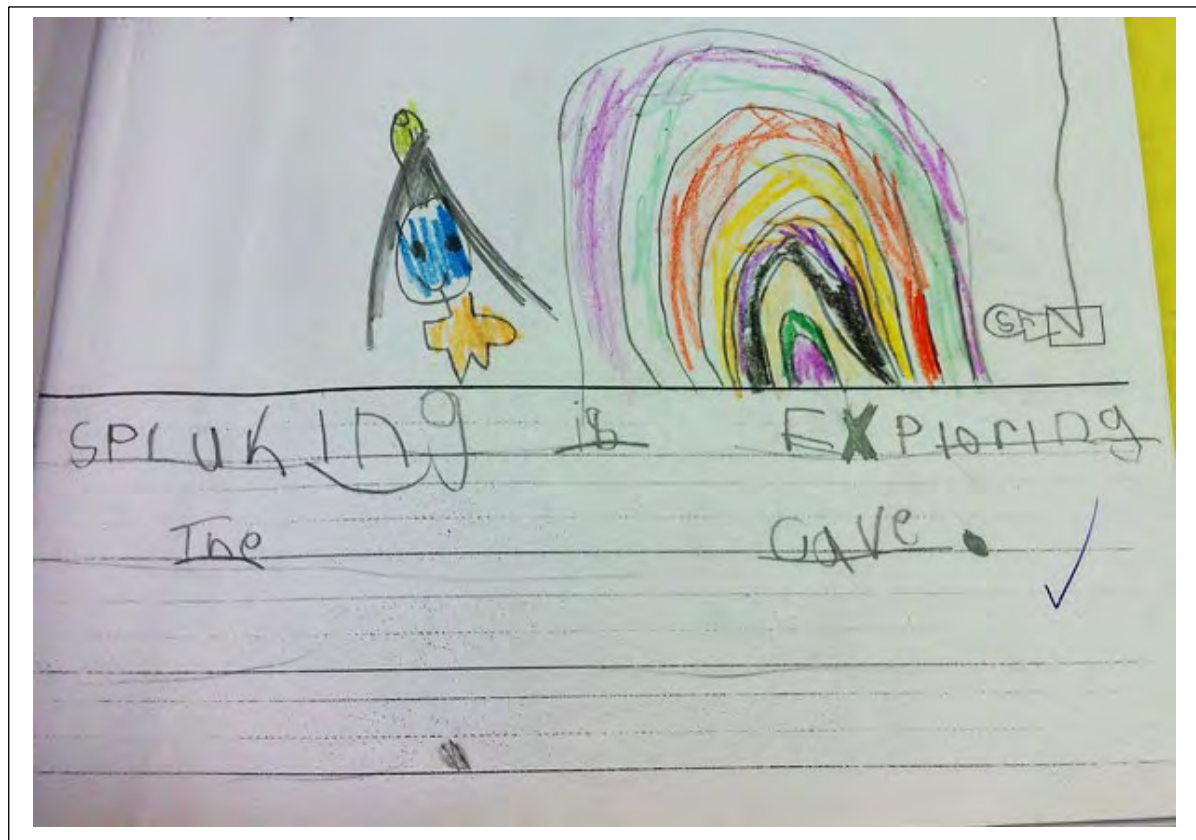"The fun and energy came back into my classroom and my teaching."

"I have seen so much success in my students' learning that I can't wait to begin teaching again next year now that I have a better understanding of the program and all of its benefits!"

"Learning all the new materials was worth all the effort and it will get easier every year."

"I am excited to have this year under my belt and to really be able to run with it next year. Learning was more exciting for me and the kids!"

Control-group teachers

Two Writing Samples from Kindergarten Children in *Tools of the Mind*

SPLUKIDg is EXPloring
The Gave. ✓

Bats Live RiGHt Next
To the salactites.
And Live aBove From
the stalagmita

These were written the week after the children had had a lesson on caves.