

Opal Charter School
Portland Children's Museum
4015 SW Canyon Rd
Portland Oregon 97221

Portland Public Schools
Charter School
Renewal Application
January 2, 2021

General Information

Name of School: Opal Charter School
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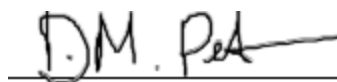
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School's Initial Opening Date: 2001
Current Grades Enrolled: K-5
Grade Levels to be Served at Full Enrollment¹: K-5
Maximum Projected Enrollment (at full capacity)²: 92



Signature of School Administrator

December 29, 2020
Date



Signature of Board Chair

December 29, 2020
Date

¹ This refers to the grade structure that has been approved by the district, rather than as an anticipated or desired future grade structure.

² This refers to the maximum student enrollment that has been approved by the district, rather than an anticipated or desired future student enrollment.

Opal Charter School renewal application 2021

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Executive Summary

1. Provide the enrollment and demographic information for the current school year in the table below. Fill in only the white fields. Report percentages where indicated.

Current Year Enrollment and Demographic Information													
Total Enrollment by Grade													
K	1	2	3	4	5	6	7	8	9	10	11	12	Total
12	15	15	17	17	13								89
Number of Students on Waiting List by Grade													
K	1	2	3	4	5	6	7	8	9	10	11	12	Total
107	36	16	8	3	3								173
Gender by Percentage													
Female		44%	Male		55%	Non-Binary		1%					
Ethnicity/Race by Percentage													
Asian		Black/ African American		Hispanic/ Latino		American Indian/ Alaskan Native		Pacific Islander		White		Multi- Racial	
		1%		13%						80%		6%	
Special Populations by Percentage													
Students with Disabilities		English Language Learners				Homeless Students		Eligible for Free and Reduced Meals (by Direct Certification)			TAG		
13%		2%						3%			6%		

2. Provide a brief description of the school, including an overview of the mission and vision, educational program, community and local partnerships, and leadership and governance. (No more than one page.)

Opal Charter School opened in September 2001, as the first charter school authorized by PPS, and serves students in grades KG-5. The charter school sits within a larger system of *Teaching & Learning* as a program of Portland Children’s Museum (PCM). With Opal Beginning School (a private preschool), Opal School serves 125 students in programs for PreK-5.

Opal School is a living laboratory for adults and children to research environments and learning conditions that promote critical thinking and strengthen democracy. Opal School is inspired by the early childhood schools of Reggio Emilia¹, which were founded after WWII as a counter response to fascism. Opal School continues research into practices that disrupt the conventional roles of educators and students. A foundational aspect of Opal School is the co-development of curriculum as it emerges from the interplay between student’s lived experiences and educator’s goals and expectations. When adults pay attention to the interests of children, children get serious about learning.

Through ongoing research, Opal School has developed a learning approach called *Playful Inquiry*. Supported by designed environments and rich materials, educators and students:

- share stories
- explore playfully
- sustain curiosity
- seek connections
- nurture empathy

We believe that *Playful Inquiry* retains the unique gifts of childhood, and supports students’ exploration of two of Opal School’s overarching intentions: • to seek out, value and be open to influence by a multiplicity of perspectives; and • to understand and appreciate the interdependence of all people, living things, and their environments.

Opal School’s research is presented to educators and the public through *Teaching & Learning’s* opportunities for professional learning². We estimate that nearly 10,000 educators have participated with Opal School since 2001, touching the lives of perhaps one million students from Portland to Dubai.

Within PPS, Opal School has partnered with Woodlawn School to expand use of the arts as languages for thinking and learning, with Vestal School to deepen teachers’ understanding of and alignment with their newly adopted social justice mission, and with Kairos PDX to collaborate on professional development. We work with Teaching Preschool Partners (Beaverton, Gladstone, and Parkrose) to expand inquiry-based approaches in PreK-5.

Opal Charter School is governed by PCM’s non-profit board of directors - community and business leaders - elected by members of the board. The board authorized Opal Advisory Council, a group of parents and staff, with a non-voting representative to the board. PCM provides centralized services (finance, facilities, fundraising, other) to Opal Charter School.

Opal Charter School is a component of *Teaching & Learning* which includes Opal Beginning School (ages 3-5), and *Museum Center for Learning* (professional development for educators). The five leaders of *Teaching & Learning* - with a combined 60 years of history guiding Opal School through its early years, continuous adaptation, and the current COVID challenges - provide pedagogical and administrative leadership for Opal Charter School.

We continue to be energized by possibilities with both students and educators. Our earliest graduates are now young adults, and return with evidence of our learning approach in their lives, and of their contributions in the world³. We are regularly inspired by visiting educators, the influence of our research in their work, and their impact on students.

¹ See www.reggiochildren.it/en/ and <https://www.reggioalliance.org/reggio-emilia/reggio-children/>

² See learning.opalschool.org/

³ See www.opalschool.org/becoming-who-i-am/

Record of Performance

This section provides charter schools with an opportunity to supplement or augment the performance record. Schools do not need to include Oregon Report Card data, as it is already on file. Schools should use the sources of data specified on pages 5-6 in this application as a guide for their responses and submit only evidence of performance related to the renewal criteria in ORS 338.065.

Responses may include, but are not limited to:

- Information about interim assessments or progress reports
- Evidence of performance on school- or mission-specific goals
- Evidence of implementation of district recommendations or plans of action
- Improvements undertaken at the school along with evidence of progress for any areas in which the school has not previously met or is not currently meeting the performance standard

Responses should not include anecdotal information or evidence that is not relevant to the school's academic, financial, and organizational performance and the school's performance expectations as defined by Oregon charter law and the charter contract.

Responses in this section should total no more than 20 pages.

Renewal recommendations will be based on all evidence of school performance in the record.

A. Academic Performance

Use this form to provide a narrative response to all questions below. If providing evidence in an appendix, clearly reference the appendix name/number in your response.

1. In brief, describe whether or not the school has met its academic performance expectations over the term of the contract.

Opal School has met academic performance expectations over the term of the contract. Opal School students generally meet or exceed the benchmarks in OAKS and OSAS, in both English Language Arts and Mathematics.

2. Using data from the "Sources of Data" section of this application, describe the trends in performance⁴ over the term of the contract in the following categories:
 - a. Student performance in Reading by grade
 - b. Student performance in Reading by race/ethnicity
 - c. Student performance in Reading by special population (ESL, SpEd, FRL, TAG)
 - d. Student performance in Math by grade
 - e. Student performance in Math by race/ethnicity
 - f. Student performance in Math by special population (ESL, SpEd, FRL, TAG)

Opal School students generally meet or exceed OSAS benchmarks. In each school year, the testing sample size is too small to draw strong conclusions about performance trends, and this is particularly true for each of the special populations.

Opal School's pedagogy of listening and relationships ensures that teachers have a robust collection of student work samples, transcriptions of dialogue, detailed observation notes and formative assessments for each student. This collected evidence allows for analyzing and reflecting upon individual students' strengths and learning edges, as well as responsive goal setting throughout the year. Each Fall, Opal School teachers develop individual goals for students that include academic content areas and characteristics of the learner reflective of Opal School's goals and expectations. These goals are reviewed and revised at regular intervals throughout the year.

Opal School students have broadly and consistently met or exceeded individual academic growth goals in reading, writing and mathematics demonstrating adequate yearly progress. When a child is not meeting goals, staff intervene early and often, involving the collaborative teaching team, students and families.

⁴ Trends in performance include growth and negative growth.

3. Describe the major academic goals of the school over the term of the contract. Explain how these have been met/not met.

Grounded in Our Values⁵, Opal School's academic goals are intertwined with other equally important goals⁶, as expressed in our **Goals + Expectations for Students**⁷:

- Discover, cultivate and express the joy and wonder of learning.
- Develop an understanding and curiosity about multiple points of view.
- Have value and empathy for experiences and perspectives different from one's own.
- Collaborate with others to construct ideas and create new knowledge.
- Develop an understanding of our interdependent relationship with the natural world.
- Take action as mindful citizens who care about making contributions to a future that acknowledges living systems as an integrated whole.
- Develop strategies that contribute to the quality of the community by having a keen sense of place, identity and belonging, while respecting the rights and identities of others.
- Read the world: Explore ideas and relationships; make connections between known and unknown information.
- Use the written and spoken word with increasing proficiency to communicate ideas, relationships and understandings.
- Uncover and communicate observations, questions, theories and ideas through skillful and imaginative uses of the languages of the arts and sciences, including mathematics.
- Develop an appreciation of and capacity for accuracy, elegant design and efficiency.

Playful Inquiry

Opal School's academic program is grounded in *Playful Inquiry*⁸, our approach to teaching and learning. We present some information about *Playful Inquiry* here, to ground the following discussion of academic goals.

Playful Inquiry is an open-ended and joyful exploration of materials, ideas, skills, and big questions that fill the senses and keep the mind open to learn. Neuroscience is clear that environments devoted to learning must be both cognitively challenging and aesthetically pleasing, to support a playful disposition in the learner. This playful disposition is achieved when conditions create high cognitive challenge with low emotional risk: relaxed alertness, the optimal state for learning. Opal School students generally exceed our goals and expectations and often produce sophisticated thinking, speaking, and writing above the Common Core standards for their grade level.

Opal School has been active in our research of questions such as:

- How do we use play in service of children learning the things they have a right to learn?
- How does maintaining a playful attitude facilitate learning and high achievement?
- Is it possible that an environment that invites play is also one that invites a sustained vigorous attitude towards learning?

Particularly in our work with older elementary-aged children - where we might typically begin to see disengagement take hold and don't typically see play in school - we find that the impact of this intentional invitation to play is most visible, surprising and profound.

We use *Playful Inquiry* as powerful scaffolding to support children as they mature to take over the inquiry process in pursuit of their own curiosity, questions and concerns. *Playful Inquiry* supports children as they develop the strong habits of heart and mind necessary for an increasing sense of agency and taking action as mindful citizens.

⁵ See Appendix A: Opal School Mission and Values, and Appendix B: Guiding Principles

⁶ See "The Graduate Portrait," [Portland Public Schools reImagined](#)

⁷ See Appendix C: Goals and Expectations for our Students and Appendix

⁸ See Appendix D: The Principles of Playful Inquiry

We see the primary task of the adult to offer experience and expertise that intentionally ties the present lives and stories of the children to the big, public stories of our history and complex issues within the present - to help children feel a part of the human experience and not separate from it, waiting or preparing for a distant future. These strategies not only support children as social constructivist learners, readers, writers, and mathematicians, but also allow them to participate authentically in their community, thereby strengthening their habits of engagement - never asking them to set them aside and wait for a later opportunity.

If play is a powerful learning strategy of the human species, how do we make sure that in school, children are using it to learn?

Academic Goals

Major academic goals during the term of our charter included increased growth as readers and writers, strengthening students' mathematical reasoning and understanding, and increasing student access and comfort with technology. Each of these goals is supported by *Playful Inquiry*.

Student growth as readers and writers is supported within the structures of *Story Workshop* and *Literacy Studio*. Student growth is measured and documented along Reading and Writing⁹ Developmental Continuums in addition to Developmental Reading Assessments (DRA), Words Their Way Spelling Inventories, analysis of student work samples with State Scoring Guides and Opal/PPS Rubrics, student interviews and anecdotal observations. Assessment of understanding is daily and ongoing.

Math instruction at Opal School lives within the context of how we approach teaching and learning (*Playful Inquiry*) and grounded within our image of children, our values and our growing understanding of the Landscapes of Mathematical Development¹⁰. Our work is informed by state and national standards¹¹, alongside our desire to create communities of mathematicians where mathematizing drives our work. We believe that relationships are fundamental to mathematical thinking - relationships between teachers, children and families; relationships between materials and environments; relationships within and across disciplines; relationships between big ideas, strategies and models; as well as relationships between numbers. We believe that children learn best, within a context, when children are offered situations to imagine themselves in so that their mathematical thinking has real work to do. These beliefs are reflected in our curriculum (*Contexts for Learning Mathematics*¹²), workshop structure, and assessment.

Story Workshop

In *Story Workshop*, a structure Opal School developed to support playful literacy in grades k-2, we organize instruction with a balance of these elements in mind: sharing stories, ample use of the arts, meaning making, and time to play. Environments intended to support both independent and collaborative storytelling are designed by teachers who make decisions in response to observations they have made of the children. Because research in neuroscience shows that in play, the children are naturally constructing narratives, we expect them to play in these environments and become increasingly aware of the stories they are creating while they play. Teachers will approach children as they play and ask, "What's your story?" In this way, children learn that the naturally engaging and satisfying work of their play has real value to the world of school, to the work of authoring, to the practice of literacy. Through whole group reflection and sharing, they develop a vision of what it can mean to live and work in a community of authors who act as listeners and can

⁹ See Appendix E: Reading Developmental Continuum and Appendix F: Writing Developmental Continuum

¹⁰ See Appendix G: Landscapes of Mathematical Development

¹¹ See Appendix H: Crosswalk Between Common Core State Standards for Mathematics and CFLM

¹² Visit www.newperspectivesonlearning.com and www.heinemann.com/contextsforslearning/

reflect back to one another the people they are all in the process of becoming. As they mature, children are expected to capture their stories in writing, to revise, edit and publish their work. Play, including with the arts, is central to the writing process of young children.

Literacy Studio

In older grades, within *Literacy Studio*, students develop increasingly sophisticated reading and writing skills and attitudes through the application of the arts, lived experience, and mentor texts. *Literacy Studio* provides opportunities to integrate content areas and imagine new possibilities for what it might mean when the state of Oregon requires the study of early American history. Within a past *Decades Project*, children became invested in the decades they were researching as they built a collaborative timeline, and they asked to try and write historical fiction based on the experience of a child living in that decade. The teacher offered a time machine so they could come to school one day in character and meet one another. On such a day, children write reflections like this:

Yesterday when we climbed into the body of our character was probably the most fun I have had this whole school year. The way that everybody was able to "leave themselves" at this year just completely worked. Everybody has worked so hard to learn everything they possibly can about their decade and that really showed and paid off. I felt that it went really well and was really fun when we went outside because a lot of the characters had never even heard of a playground." -Opal School fifth grader

This particular project met state requirements by having the children use that time machine to attend the Constitutional Convention and deliver speeches they'd written from the perspective of the character they'd created. They hoped to inform the Framers of the experiences they'd lived in the country governed by the Constitution, and they hoped to engage the Framers in revisions based on those experiences that might have provided a more equitable pursuit of liberty for their posterity. Children were challenged to articulate and more fully explain their positions, and ultimately coming to consensus on new language.

One suggested revision read like this:

When there are sides that are not in agreement, make a compromise that will make all sides happy enough to avoid conflict.

This revision is not surprising because this is the very work children face, themselves, in their play all the time, and that these children had been working out with one another all year. Their experience is part of the human experience. And learning that comes as a result of reflection on that experience has value for the world we create as we live it, endlessly into the future. This is what *Playful Inquiry* invites us to discover and trust.

Math Workshop

In support of our mathematics goals, we have organized all math instruction in small groups. We have reduced group sizes so that every individual is even more visible than they might otherwise be, resulting in more targeted instruction. Teachers offer rich and intentional problems with many entry points for diverse learners. Math mini-lessons, investigations and congresses are structured to support children to become flexible, efficient and elegant mathematical thinkers and communicators.

Students are evaluated on their understanding of big ideas, use of problem solving strategies and construction of mathematical models. More formal assessments are given throughout the year to provide snapshots that support the development of planning for instruction that is responsive to the needs of both the individual and the group. Growth over time is documented within individual student landscapes based on formal assessments, analyzing of student work, classroom observations and transcriptions of mathematical dialogue.

Opal School students consistently meet individual math learning goals, although some students have demonstrated gaps between classroom assessments and demonstrated learning through state work samples and testing. Opal School recognized the need for greater calibration of work sample scoring amongst staff, opportunities for students to practice their individual mathematical reasoning alongside collaborative partner work, strengthening mathematical vocabulary and growing staff understanding of the mathematical landscape. These issues have been addressed through internal professional development including weekly team meetings, organization of new systems of documenting student learning and growth over time and purchasing of additional professional support materials (curriculum and assessment).

Technology

One of the identified challenges and related goals within the charter school over the term of the contract was student access and experience with digital technology. This issue impacted some students' attitude toward computer-based testing and their ability to access/demonstrate knowledge within a digital format.

Opal School believes that digital technology enters the daily life of the school not to dominate but to merge with other forms of expression. Digital technology can amplify what we have in our imaginations, it can create worlds that can be situated elsewhere in time and place, and it can allow us to find out more information. Our goal is for students to become literate and fluent in the possibilities of digital technology as a research, communication, and publishing tool in ways that support Opal School values. In a school that values a strong image of the child as creative, competent and resourceful, full of wisdom that the world needs, there should be no need for technology to motivate children to connect with an idea. The idea must have merits and opportunities to connect and engage in its own right.

Being in solidarity with children means acknowledging that learning is sometimes a struggle. It is the teacher's role to support children to remain active in this struggle. As adults we must be vigilant about protecting children from the lure of digital technology to solve our struggles, or to learn for us. Digital technology must support the children as authors who can ultimately express their ideas in myriad ways, with confidence, competence, and ingenuity.

Opal School initially purchased a small set of Chromebooks in 2015 to use throughout the school and has since increased the number of available devices as budget allowed. Prior to Comprehensive Distance Learning (CDL), access and introduction to technology, including digital citizenship and keyboarding, began in third grade. Student comfort level, skill and understanding of the affordances of digital technology have increased as demonstrated through collaborative digital projects, individual student publishing, internet research, keyboarding and observation of on-line test taking.

4. Describe the major academic recommendations from the district over the term of the contract. Explain how these have/have not been implemented.

In 2013-14 the district recommended that Opal School provide increased access and experience with technology in grades 3-5 within the context of the classroom curriculum.

Opal School purchased a small set of Chromebooks in 2015 and integrated these into the writing curriculum. We have purchased additional Chromebooks over the subsequent years as budget allowed. Chromebooks are now an integral part of the writing curriculum in grades 3-5, and are also used by students for teacher-guided research.

In 2016-17 the district recommended that Opal School add a goal of reducing the rate of students who are categorized by ODE as chronic and severely absent.

Opal School implemented a communication strategy to support this goal, and chronic and severe absenteeism was reduced from ~22% in 2016-17 to ~10% in 2017-18 and 2018-19. While the response may seem strong, this has been an imperfect rollout. Early communications - based on our understanding that communications should be standardized and uniform to avoid potential bias - caused harm to families whose student absence is largely out of their control. We revisited our communication strategy to be more consistent with our pedagogy of listening and relationships, with the goal to build awareness of the impact of high absence rates on both community and individual student learning.

In 2018-19 the district recommended that Opal School increase its OSAS participation rate to increase the statistical validity of testing data, in particular for student subgroups.

Opal School's small cohort of testing-age students results in a sample size that is too small to draw statistically valid conclusions, even when considering the entire student body, and particularly with special populations. Opal School's small size, and our practice of observation and documentation, results in detailed notes and ongoing assessment. Our collaborative teaching structure allows robust discussion of next steps for each student, and an individual response to and revision of each student's educational plan.

Opal School continues to communicate with families about the role of Oregon standardized assessments. Our families often choose Opal School because of their alignment with our goals and expectations, and our emphasis on social-emotional development and relationships, as a foundation for student engagement and learning. Opal School families are aware of and often embrace their rights under Oregon law to opt-out their student from OSAS testing.

In 2018-19 the district recommended that Opal School "investigate the effectiveness of its K-3 mathematics instruction, as the 3rd grade test data is the only level showing results lower than District average."

Note: the 3rd grade testing cohort was 14 students.

Opal School added an Academic Action Goal to strengthen K-5 mathematics instruction. In 2019-20, we expanded instruction hours, purchased newly-available mathematical contexts (to replace school-developed curricula in specific strands), purchased assessment tools for teachers tied to mathematical landscape, and added a professional development focus.

Opal School believes that these standardized test scores highlight the difference between our students' strong mathematical understanding - as developed through our social constructivist practice and demonstrated in math congress - and the limitations of isolated questions, assumptions and methodology in OSAS testing and state work samples.

We consider standardized, summative assessments to be only one measure of student learning, and not the only measure. We place a strong value on the social, emotional and cognitive learning that is made visible through students' participation in collaborative, long-term, inquiry-based projects, the depth of their questions, the creative thinking and innovative approaches they use to solve problems and conflicts, and their abilities to use materials, the arts and the sciences as languages for communicating complex ideas. These valuable life skills are not readily measured with multiple choice questions or standardized testing. However, they are critical abilities that our children and our society need to thrive in the twenty-first century.

5. Provide evidence of outcomes related to any mission-specific academic goals and measures established in the charter contract or in the school's own performance plan.

People oftentimes ask, "What becomes of children after they graduate Opal School?" Our new film, [Becoming Who I Am](#)¹³, illustrates how these learning environments lead students to become the neighbors, coworkers, and changemakers the world needs. We encourage you to hear directly from some of Opal School's alumni who are now young adults.

6. Provide any other academic performance-related evidence, supplemental data, or contextual information that may not be captured in the district's records or in other information provided in this application. All information should be aligned to the renewal criteria stated in ORS 338.065. Any appendices should be clearly referenced. Do not restate information that has already been provided.

¹³See Appendix I: Becoming Who I Am (vimeo), also www.opalschool.org/becoming-who-i-am/

B. Financial Performance

Use this form to provide a narrative response to all questions below. If providing evidence in an appendix, clearly reference the appendix name/number in your response.

1. In brief, describe whether or not the school has met its financial performance expectations over the term of the contract.

Yes, Opal Charter School has met financial performance standards over the term of the contract, and maintained maximum enrollment each year. The municipal audit for Opal Charter School consistently receives an unqualified opinion.

2. Using the data from the "Sources of Data" section of this application, describe the trends in performance over the term of the contract in the following categories:
 - a. Near-term measures (assets to liabilities, unrestricted days cash, default)
 - b. Sustainability measures (total margin, debts to assets, cash flow, financial reporting and compliance, municipal audits)
 - c. Long-term measures (financial planning, budgeting, fundraising, grants)

Opal Charter School operates as a component of Portland Children's Museum under a lean budget, with Asset:Liability ratio of 2.0, and approximately 90 days unrestricted cash. Opal Charter School generally generates positive cashflow, and has no significant debt due to a favorable building lease in exchange for substantial investments in leasehold improvements - both capital and volunteer labor.

Opal School has budgeted conservatively in recent years, and manages expenses to meet available revenue. Year-to-year changes in Assets and Liabilities related to outflows and inflows of resources (PERS accounting transactions) impact our financial statements, but not our cash position or practices.

Opal Charter School's financial planning and budgeting are developed in consultation and coordination with PCM's *Teaching & Learning*, with revenue earned from professional development offerings also used to provide non-instruction support and leadership for Opal Charter School.

3. Describe the major financial goals of the charter school over the term of the contract. Explain how these have been met/not met.

Over the term of this charter contract, our major financial goals included:

1. building earned revenue capacity from professional development offerings;
2. negotiating equitable sharing of costs for centralized services;
3. building a culture of community fundraising;
4. coordinating fundraising efforts with Portland Children's Museum.

Prior to the disruption of COVID, we were advancing toward each of these financial goals.

Earned revenue from professional development offerings has grown steadily during the term of this contract, and (pre-COVID) was expected to bring in over \$500K in 2019-20, approximately equal to 85% of SSF funding. Opal School has invested over a number of years in an online learning management system, and this allowed us to pivot to remotely presenting the annual Opal School Summer Symposium. Opal School's in-person and online courses are attended by educators from around the world. Opal School staff have provided conference presentations and customized consultations to organizations across the United States and around the world. Recent engagements have been hosted by NCTE's Early Childhood Assembly (USA), Central Okanagan Public Schools (Canada), GEMS Education (Dubai), Hong Kong International Schools, and Semann Slattery (Australia).

As a program of Portland Children's Museum, Opal Charter School is engaged in ongoing dialogue and negotiation about the use and cost of shared services, with the goal to optimize and streamline processes to support the entire organization. These efforts are ongoing.

Opal School has an enthusiastic community of supporters, and is limited in fundraising due to the small size of our school community, and the lack of major giving capacity.

4. Describe the major financial recommendations by the district over the term of the contract. Describe how these have/have not been implemented.

The district has not made any financial recommendations during the term of this contract.

5. Provide any other financial performance-related evidence, supplemental data, or contextual information that may not be captured in the district’s records or in other information provided in this application. All information should be aligned to the renewal criteria stated in ORS 338.065. Any appendices should be clearly referenced. Do not restate information that has already been provided.

Oregon Charter Schools operate with funding limitations and increased expenses, compared to district schools. Charter schools are not able to participate in some of the public funding streams available to district schools, and charter schools are subject to the highest PERS rate in Oregon. The following table illustrates the funding gap and impact of PERS on a hypothetical budget for a charter school the size of Opal School:

		Budget Approximation		
		District	Charter	Comparison
Revenue*				
	Local Option	\$149,000	\$0	0%
	SSF	\$773,820	\$619,056	80%
	SIA	\$20,000	\$20,000	100%
	PDX Arts Tax	\$11,000	\$11,000	100%
		\$953,820	\$650,056	68%
Expenses**				
	Instruction:			
	- Salaries***	\$562,500	\$351,000	62%
	- PERS	\$22,500	\$94,770	421%
	- Payroll Overhead	\$121,444	\$84,065	69%
	Support Services	\$247,255	\$175,000	71%
		\$953,699	\$704,835	74%
Funding Gap				
	Other Sources		\$54,779	
	Required		8.4%	

*Does not include other public revenue from property taxes, or federal program funding.

**Does not include the usual expense for building lease. Opal Charter School has reduced rent, in exchange for prior investment in leasehold improvements.

***"District" Salaries are calculated per PAT contract to mirror charter school teachers (FTE equivalent for grade and step).

The burden from this compression of revenue and expenses is born by licensed teachers, who receive significantly lower compensation compared to district teachers. This impacts our ability to recruit and retain teachers, especially as they gain experience and steps in the salary scale. While we welcome the opportunity to train teachers who will work in district schools, it adds another dimension to the work of the school with it’s tight budget.

C. Organizational Performance

Use this form to provide a narrative response to all questions below. If providing evidence in an appendix, clearly reference the appendix name/number in your response.

1. In brief, describe whether or not the school has met its organizational performance expectations over the term of the contract.

Yes, Opal Charter School has met its organizational performance expectations over the term of the contract.

2. Using data from the "Sources of Data" section of this application, describe the trends in performance over the term of the contract in the following categories:
 - a. Implementation of the terms of the educational program as defined in the charter contract
 - b. Compliance with applicable education requirements
 - c. Protecting the rights of all students, including students with disabilities and English Language Learners
 - d. Compliance with applicable governance requirements
 - e. Holding the administration accountable
 - f. Compliance with reporting requirements
 - g. Compliance with teacher and other staff credentialing requirements
 - h. Compliance with facilities and transportation requirements
 - i. Compliance with health and safety requirements
 - j. Handling information appropriately
 - k. Compliance with all other obligations

Opal Charter School meets ORS expectations for organizational performance in all areas.

Opal Charter School has implemented and innovated its educational program during the term of this contract. We continue to hone our practice of *Playful Inquiry*, and have invested in research to develop *Story Workshop*, a structure that supports early literacy development through *Playful Inquiry* and the languages of arts and sciences.

Opal Charter School understands and protects the educational and privacy rights of our students, including students with disabilities and English Language Learners.

Opal Charter School understands and is in compliance with educational, governance, reporting, credentialing, health and safety requirements and other charter school obligations.

3. Describe the major organizational goals of the organization during the term of the contract. Describe how these have been met/not met.

Administrative Structure: Opal Charter School has revised its supervisory and administrative structure. For school administration, the management and supervision of teaching and learning was separated from the management of the school infrastructure. Two members of the leadership team collaborate, but have separate areas of responsibility: curriculum support, teacher supervision and professional development, vs systems, infrastructure, reporting and compliance.

With this administrative structure, Opal Charter School has invested in communication and management systems that better support the needs of the school (staff and families), and streamline office operations.

Management Systems: Opal Charter School has invested in systems to capture and disseminate the institutional knowledge regarding policies and practices, whether related to office and enrollment processes or curriculum development and resources. Opal School has implemented systems to track Opal School alumni.

Teacher Retention: Opal Charter School continues to address the goal of increased teacher retention, through compensation policies and review as well as workload considerations. Teacher retention has an outsized impact on our very small school. We have adopted - but have not yet fully achieved - a salary scale for licensed teachers that is different from the salary scale for non-licensed museum staff. While we have made some progress toward fair teacher compensation, our licensed teachers are paid significantly less than licensed teachers under the PAT contract. We have made some progress to align expectations with work load and provide additional systems and support.

Shared Service Expense: As a program of Portland Children's Museum, Opal Charter School is engaged in strategic planning and discussions related to core mission support, and continues to work toward redefining a complex organizational structure to support all programs.

Transportation and After-school Care: Opal School developed plans to provide home-to-school transportation for students, as this has been identified as a strong community need and a major barrier for families - particularly families experiencing poverty - to attend Opal School. Opal School administration worked with PPS Transportation to develop a single bus route that would provide transportation from a limited number of access points, and also worked with PPS contracted providers to create a web of after-school care providers who would serve as those access points. This plan addressed two major needs of our community that hinder our efforts to enroll underserved PPS students.

PPS Transportation has been unable to implement this plan due to staffing constraints.

4. Describe the major organizational recommendations from the district over the term of the contract. Describe how these have/have not been implemented.

In 2013-14 the district recommended that "PCM administration should consider adding support to school administration, given the workload and the expectations of the school, some of which are outside the scope of school operations."

Opal School restructured its administrative function to better support school operations. It is important to note that Opal School's very small size (90 students) and varying physical classroom sizes (one with 15 students) precludes any benefit from economy of scale.

In 2014-15 the district recommended that Opal School revise its lottery application to better protect student privacy and to clarify the status of out-of-district applications.

Opal School has implemented these recommendations.

PPS has recommended that Opal Charter School consider implementing a weighted lottery, with the goal to diversify its student population in multiple dimensions.

The statute to allow a weighted lottery - without a waiver - is no longer in effect¹⁴. Opal Charter School has determined that the risk and cost of potential litigation arising from a weighted lottery is too high compared to our limited reserve, and could jeopardize the viability of the school at this time. Further, we believe that there are many factors contributing to the lack of diversity at Opal School, and a weighted lottery is unlikely to have a significant impact. Some thoughts: The percentage of students enrolled from diverse backgrounds is lower than their percentage in our lottery. We receive a higher percentage of lottery applications for students in older grades, and rarely have openings in these grades. We know that many families are unable to accept an offer of enrollment due to our location, lack of transportation, lack of onsite after-school care, and other wrap-around services. While we have many strategies - and success during Opal School's early years - to address these issues, our current ability to do so is subject to multiple constraints: location, funding, reliance on partners (PPS Transportation). With full funding of the SIA (Student Investment Account) we will begin addressing the most urgent needs of our community.

¹⁴ www.oregonlaws.org/ors/338.125

5. Provide any other organizational performance-related evidence, supplemental data, or contextual information that may not be captured in the district's records or in other information provided in this application. All information should be aligned to the renewal criteria stated in ORS 338.065. Any appendices should be clearly referenced. Do not restate information that has already been provided.

Some of the intentions of Oregon ORS 338.015¹⁵ are

- (5) Encourage the use of different and innovative learning methods;
- (7) Create new professional opportunities for teachers;

Since 2001, Opal School has hosted visiting educators, traveled to many countries for consultations, and welcomed participants to Opal School Online¹⁶.

The research that was foundational for *Playful Inquiry* led to the development of *Story Workshop*:

Story Workshop is inviting teachers who understand that children learn best through play, but struggle to find a place for it, to infuse it right into literacy instructional time, and they are seeing the explosion of motivation and engagement that happens when they do. Story Workshop is helping teachers who have practiced Writer's Workshop for a long time, but have been challenged by those students that never have anything to write about, find out that all children have stories to tell. Story Workshop is allowing teachers who lament the loss of the arts in the child's school day find a way to put them to use in new ways that work for everyone.

Having started at Opal School, the structure of *Story Workshop* is now being used in classrooms around the world, by hundreds of teachers. *Story Workshop* has been the subject of workshops for educators - both in-person and on-line - and now will be a book written by Opal School faculty, ***Story Workshop: New Possibilities for Young Writers***, to be published by Heinemann in Spring 2021¹⁷.

¹⁵ www.oregonlaws.org/ors/338.015

¹⁶ See Appendix J: Opal School Workshops 2019-20

¹⁷ See Appendix K: *Story Workshop* Publication Announcement, also: www.opalschool.org/announcing-story-workshop-new-possibilities-for-young-writers/

Plans for the next charter term

This section provides the charter school with an opportunity to discuss plans for the next charter term. Charter schools should use this section to outline a deliberate plan for sustaining success, addressing areas requiring improvement, and ensuring the ongoing viability of the organization.

Charter schools should also use this section as an opportunity to identify all material modifications, changes or additions that the school may be seeking during the next charter term. Examples of this include, but are not limited to: adding or removing grades, raising the enrollment cap, substantively changing the instructional model or the mission, operating in more than one location, etc. In the case of such requests, the district reserves the right to request additional information so that it may sufficiently assess the impact and planning for such changes. Even if the proposed changes would occur several years into the next charter term, the charter school should outline them here, as any substantial change will be part of the next contract. **Any proposed substantive modifications must be stated in this section and are subject to approval by the district consistent with policy and state law.**

Note: Responses to this section will not be the basis for the district's decision for renewal or non-renewal. Consistent with NACSA's *Principles and Standards for Quality Charter School Authorizing*, the district will make its decision based on the school's record of performance, as opposed to the promise of future performance or improvement. All renewal decisions will be aligned with the criteria for renewal stated in ORS 338. If the school's renewal application is approved, the plans presented below will inform relevant sections of the charter contract for the new term.

Instructions: Use this section to describe the charter school's academic, financial, and organizational plans for the next charter term. As stated above, describe any proposed material modifications that the charter school will seek in the next term. This section should not exceed 10 pages.

A. Academic Plan

Opal School is excited to align with the **Portland Public Schools Reimagined** initiative, and plans to use our learning approach of *Playful Inquiry* as the conduit to prepare students to lead change and improve the world through compassionate, critical thinking and the ability to collaborate and solve problems, in order to be prepared to lead a more socially just world.

Playful Inquiry, developed over 20 years of research at Opal School, is an approach to learning which thrives on community, and courageously and collaboratively relies on the unique gifts of childhood. *Playful Inquiry* helps children question what it means to be a citizen world-maker in the midst of uncertainty.

The principles of *Playful Inquiry* - telling stories, connecting with one another, being curious about the world, seeking meaning, and even being good to one another¹⁸ - are hard-wired into our species. In other words, we're not broken - but some of our current systems most certainly are. In our efforts to organize, industrialize, strategize, standardize - we've lost our way, and we've obscured the creative birthright of many who've happened along. By placing a value on our natural learning strategies in our communities and our institutions, Opal School helps shift our culture towards a sustainable future, and support children to be changemakers.

To be responsive to a child's innate sense of wonder is to help choreograph a life-long dance with the world that we experience and create as we live out our lives. As Opal School creates environments steeped in playful inquiry, we support children to grow into adults who have an understanding of their own capacities—whose minds have richly developed pathways layered with possibilities for new and flexible connections. These are minds that can solve complex problems, invent novel solutions, lean into difference with curiosity, imagine another's perspective and communicate with confidence and competence.

We believe *Playful Inquiry* can play a role in our pursuit of a more just and equitable world, and plan to use classrooms as the laboratory for teachers and children to co-research some of the following questions:

- What is the relationship between *Playful Inquiry* and anti-racist, pro-democracy education?
- What are the rights of children and responsibilities of adults within anti-racist , pro-democracy education?
- How might exploring stories from the past alongside current issues, fuel curiosity as a pathway to empathy, understanding and belonging?
- How do we create a culture where listening is transformational for all?

Children willingly place themselves in the position of struggle and disequilibrium. And that hard work is the work of freedom. In her call for a new education system, Dr. Bettina Love quotes Michael Hames-García:

"The very fact of freedom's incompleteness (no one is free so long as others remain unfree) necessitates action directed at changing society. Freedom, therefore, is ultimately a practice, rather than a possession or a state of being."¹⁹

¹⁸ Daniel Goleman, *Social Intelligence: The New Science of Human Relationships* (2006)
www.powells.com/book/...-9780553803525

¹⁹ Bettina Love, *We Want to Do More Than Survive: Abolitionist Teaching & the Pursuit of Educational Freedom* (2019, p9)
www.powells.com/book/...-9780807069158

Playful Inquiry is intended to facilitate that practice. At Opal School, we believe that children have a right to joy. But we agree with Love’s definition when she writes,

“I am talking about joy that originates in resistance, joy that is discovered in making a way out of no way, joy that is uncovered when you know how to love yourself and others, joy that comes from releasing pain, joy that is generated in music and art that puts words and/or images to your life’s greatest challenges and pleasures, and joy in teaching from a place of resistance, agitation, purpose, justice, love, and mattering.”²⁰

The world is an uncertain place and play is the strategy we have that makes it possible for us to thrive; play invites a welcoming attitude toward change and makes not knowing less dangerous. Play makes learning less dangerous. In Playful Inquiry we ask not only what supports children to be seen and heard but also what at the same time communicates to children that they are *worthy* of being seen and heard. We strive to create practices that support each child to walk into the classroom each day knowing that they matter and that the work that goes on there each day couldn’t happen without them--that it wouldn’t be the same without them. Playful Inquiry strives to ensure children learn how to live like they matter.

B. Financial Plan

Opal Charter School has a long history of tight and lean financial planning and execution. With the reality of a new relocation and the possibility of expanded enrollment, the school will rely on some small economies of scale, leading to enhanced financial stability. At the same time, Opal Charter School will need to budget for school lease expenses that are not incurred at its current location - the benefit of prior capital and volunteer labor invested in its facilities (see **New Location**, under section C. Organizational Plan, next).

Opal Charter School has a financially synergistic relationship with *Museum Center for Learning* - contributing to revenue-producing events and products, and also using those revenues to provide support services. We anticipate a return to robust revenue post-COVID restrictions, and increased revenue-producing opportunities when we are located in a facility with fewer constraints.

C. Organizational Plan

The COVID-19 pandemic has impacted the timeline related to Portland Children's Museum's strategic 10-year roadmap to a new location. The call for racial and social justice has strengthened the desire for organizational transformation and highlighted the need to support all children in our region, especially families who are Black, Indigenous and people of color. *Playful Inquiry* is a lense that serves not only students and educators, but also open possibilities for our work with each other (colleagues) and the visiting public at Portland Children’s Museum. We envision the future as *The Center For Playful Learning*. Opal School’s pedagogy and research are integral to this transformation.

In practical terms, the broad strokes for the next few years for Opal School and Portland Children’s Museum are:

- New Location
- Increased Enrollment in K-5
- Publicly-funded Preschool

²⁰ Love (2019, p15)

New Location

The 30-year lease at our current location will expire in 2031, and our landlord (Portland Parks & Recreation) has notified us that our lease will not be renewed - our building is not included in the Washington Park master plan. While we are cognizant of the difficulties in finding a suitable site for a charter school, we believe this forced relocation is an opportunity to expand and diversify our student enrollment in important ways. We are committed to becoming (again) a school that serves historically underserved students. We believe Opal School will be strongest when its community is reflective of Portland.

A significant limiting factor in outreach, recruitment, and retention is our current location in Washington Park. As we develop criteria for a new location, we will seek a location that is accessible to a multi-lingual, multi-racial, multi-ethnic population within a poverty-impacted area. At this time, we do not know whether we will co-locate with Portland Children's Museum, and this will become clear during the next years of strategic planning and goal-setting for the school and the public museum programs. It is important to Opal School to provide wrap-around services for students, and the school would seek a location where we can be in partnership with organizations who serve children and families, and weave the school into a network of support for them.

Increased Enrollment

A new location will likely provide an opportunity to serve more PPS students who seek school choice. On average, we have more than 10 lottery applications for each opening in our school each year. We are unable to expand in our current four classrooms. Increased enrollment would have positive impacts in a number of realms, including: student experience, teacher experience, professional development, community partnerships, and finances.

Increased enrollment would serve our students.

The current small student body sometimes creates social challenges as children may be with the same small grade level group for 6 years. With a limited number of classrooms, children are not always provided enough opportunities to rewrite the story of who they are in the eyes of their peers nor enough opportunities to reimagine the story of others. More than one classroom per grade would give additional flexibility in grouping students. We know that the emotional and cognitive domains are intertwined, and learning is impacted when there are unmitigated tensions in group dynamics.

Increased enrollment would serve our teachers.

Because visiting educators are observers in our classrooms, it can be one additional hurdle to hire a teacher who has less experience because of the expectation to teach in this public setting. With more classrooms available, there is an opportunity for new teachers to grow their practice with less public observation. For established teachers, more classrooms could mean fewer or alternating groups of visiting educators, because they other classrooms are available. This could contribute to the goal of better management of teacher workload. We would also have a greater ability to weather teacher transitions.

Increased enrollment would serve professional development.

Additional classrooms would provide more laboratories for research and documentation, and more opportunities for visiting educators to observe our pedagogy. A more diverse student body could make our pedagogy more obviously accessible to more teachers.

Increased enrollment would serve community partnerships.

Having more educators would provide greater opportunities for collaboration with other schools and community organizations serving children and families. A larger faculty would provide new teachers with multiple opportunities for mentorship with different experienced teachers.

Increased enrollment provides greater financial stability.

The administrative effort to manage a charter school does not expand at the same rate as enrollment, and additional funding could translate into salary increases or additional support staff.

We have considered more than one option for expanding our program, and recognize that it is not possible to predict future enrollment capacity until a new location is selected. The primary options are:

1. to enroll 150 students in 6 classrooms, and
2. to enroll 250 students in 10 classrooms.

While we do not aspire to become a large school, we have learned that it is a challenge to meet competing needs in a school of 90 students.

Transitioning to a Publicly-Funded Preschool

Opal Charter School benefits from its close relationship with Opal Beginning School, currently a private preschool. Opal School educators from preK to grade 5 work together in conducting research and providing professional development for our own staff and for others. Charter School students who are early readers benefit from reading to even younger (preschool) children, while older elementary students develop empathy and compassion through their relationships with preschool-age students. Opal School exists as a unified school, even while the two programs have different enrollment criteria and funding sources. This is not without tensions.

We are eager for the opportunity to enroll preK students who receive a publicly-funded early education. Over the next few years, we plan to transition from private tuition to a publicly-funded program, and welcome a more economically diverse group of students and families. We expect to begin enrolling students under Preschool For All in 2022-23, and this program will grow over time.

We know that high-quality academics are connected to strong relationships, and we see value in being in partnership with a child and their family from ages 3-11. In its early years, Opal Charter School operated one of only a few preschool programs within a charter school. We know that it is possible - albeit with many constraints - to open lottery spots for preK students. We are investigating whether the new publicly-funded Preschool for All program may allow us to offer a limited number of preK placements in the charter school lottery. We will investigate the possibility of a state waiver so that we can lottery children who are placed through the Preschool for All program into Opal Charter School.

OPAL SCHOOL MISSION

Opal School strengthens education by provoking fresh ideas concerning environments where creativity, imagination and the wonder of learning thrive.

OPAL SCHOOL VALUES

A powerful image of the young child as intelligent, creative and capable with gifts and abilities that the world needs.

A belief that children play a central role in their own learning, and that learning is central to the health of our democracy.

A deep respect for differences however they may be expressed, and a belief that diversity strengthens community.

A belief that listening, dialogue and exchange open doors to unimagined possibilities, and that school is where we learn to walk through them with courage.

A view that learning happens when people form relationships with one another, ideas, materials and the environment.

A belief in the rights of children, families and educators to participate together in forming and shaping rich environments of learning, challenge and choice.

*The child has a hundred languages,
a hundred hands, a hundred thoughts
a hundred ways of thinking, of playing, of
speaking ... and a hundred, hundred more.*

—Loris Malaguzzi

Opal School Guiding Principles

Our guiding principles for teaching and learning keep the school a living and vital place. They are the core beliefs about teaching and learning from which all school experiences are born. No principle sits in isolation. Each is connected, influenced and shaped by the others. They support an instructional approach based on listening and relationships.

Our guiding principles are inspired and influenced by the early childhood schools of Reggio Emilia, Italy, research in the field of neuroscience, and constructivist practices in the United States and beyond.

Children as Protagonists

Children are competent, resourceful and creative with imagination and curiosity about the world around them. They come to school full of experience and wisdom in their natural approaches to make meaning of their lives.

Children as Collaborators

No child lives or learns in isolation. A child is always in search of relationships. Children learn and become themselves through interaction and relationships with other people, ideas, objects and symbols.

Children as Communicators

Children make their thinking visible to us in many ways, including words, drawing, numbers, dance, painting, building, sculpture, shadow play, collage, drama, music and more. Children use many kinds of materials to discover and express what they know, understand, wonder, feel and imagine.

Children and Adults as Researchers & Co-Creators

Our school is a learning community where children and adults collaborate as researchers to co-create and document experiences that have originated from their relationships, challenges and choices. Teachers are engaged in continuous discussion and dialogue. They collect raw data and use this information to plan, prepare, provoke, assess and inform the community of the school's practices, learning, and outcomes.

Families as Partners

Family participation in the life of the school is essential and takes many forms. The exchange of ideas between families and teachers is vital to development of a learning community. Families have the potential to bring vitality and richness to the school by contributing distinctive life experiences and wisdoms.

Strong Academics Connected to Quality Relationships

A strong academic program is best supported within a system of reciprocal relationships among people, ideas, the natural and built world, and the content and skills of the disciplines.

Culture of Respect

Respectful agreements and boundaries support the need for physical and emotional safety and order as they are identified, discussed, practiced, and experienced within a culture of listening, dialogue, and exchange between children and adults.

Environment as Teacher

The design and use of space encourages encounters, communication, and relationships. It informs children and adults about possibilities. There is order and beauty in the arrangement of space, equipment and materials.

Documentation as Communication

Careful attention is given to the collective work of children and adults by transcribing dialogue, taking photographs, and making visible the ideas of children in many media. Documentation informs children, teachers, and the public of children's learning strategies, group learning processes, and learning outcomes. By making the powerful ideas of children visible to the public, children truly become citizens.

Organization as Foundational

The well-designed use of space and organization of materials, schedules, and curriculum are essential to the creation of a school community, where creativity, imagination and learning thrive.

GOALS AND EXPECTATIONS FOR OUR STUDENTS

Discover, cultivate and express the joy and wonder of learning.

Develop an understanding and curiosity about multiple points of view. Have value and empathy for experiences and perspectives different from one's own.

Collaborate with others to construct ideas and create new knowledge.

Develop an understanding of our interdependent relationship with the natural world.

Take action as mindful citizens who care about making contributions to a future that acknowledges living systems as an integrated whole.

Develop strategies that contribute to the quality of the community by having a keen sense of place, identity and belonging, while respecting the rights and identities of others.

Read the world: Explore ideas and relationships; make connections between known and unknown information.

Use the written and spoken word with increasing proficiency to communicate ideas, relationships and understandings.

Uncover and communicate observations, questions, theories and ideas through skillful and imaginative uses of the languages of the arts and sciences, including mathematics.

Develop an appreciation of and capacity for accuracy, elegant design and efficiency.



The Principles of Playful Inquiry

By Susan Harris MacKay

*Adapted from What About Play?: The Value of Investing in Child's Play
by Susan Harris MacKay, 2010*

What is the role of adults in playful inquiry?

Our research practices at Opal School and at Portland Children's Museum have offered us the opportunity to observe, interpret, and reflect on countless interactions between children and the adults who are their caregivers. On any given day, we see children and grandparents, parents, caregivers, and extended families. We see our own volunteers and play-guides interacting with children who visit our museum exhibits and studios. We see children and their teachers in our preschool through fifth-grade classrooms. From this vantage point, and within the context of current research from the fields of the neurosciences, developmental psychology, and education, we've developed some ideas intended to support adults in their desire to be productive and inspiring companions to the children in their care.

We have found the following ideas help to guide adult interactions with children in playful inquiry.

Adults can...**Inspire Curiosity**

We have found that when adults pay attention to the interests of children, children get serious about learning. The more they expect to be listened to, the more curious they become about their experiences. Children come into the world wired to try and make sense of it. When we pay attention to the things that children seem to wonder about, learning becomes joyful - and a sense of wonder is established and sustained.

We encourage adults to listen to children and ponder questions together that neither of them knows the answers to. As noted Stanford professor Elliott Eisner

reminds us, “Unanswerable questions should be a source of comfort. They ensure that you will always have something to think about! But why do puzzlements provide satisfaction? Because they invite the most precious of human abilities to take wing. I speak of imagination, the neglected stepchild of American education.”

A curious mind is an alert mind, and one that is primed for learning. Alertness, focus and attention are the keys to developing strong pathways in the brain because the physiological process of developing those pathways relies on them (Merzenich, 2008; Neville, 2008). Children attend to meaning because it motivates and engages them. They benefit tremendously from the company of a curious, attentive adult who is willing to share his or her own meaning making process authentically and generously.

Adults have the opportunity to create environments that are as rich in possibilities for curiosity and discovery as an old growth forest or a beach at low tide. Classroom environments should encourage children to become lost in their play, and adults to let them.

Adults can remember to ... **Explore Playfully** .

Playfulness is an attitude of freedom, joy, possibility, and imagination. It is a quality of genius (Armstrong, 1998). An essential aptitude (Pink, 2005). In play, we have the opportunity to reinvent the world we find around us. Adults can offer children the opportunity to explore art, nature, mathematics, literature, geography, technology or anything else they want children to learn—and they can do it with a playful attitude.

During play, focus is often so intense that all sense of time is lost. A mind that has been playfully and freely associating is “primed to tackle new ideas” (Paley, 2005).

In playful inquiry, the idea isn’t so much to avoid or distract ourselves from reality as it is to find a personal way to interpret and make meaning of it. In play, our minds have the best opportunity to make meaning and connections because we are free from the consequence of mistakes and the fear of being

wrong. The pleasurable emotions associated with play relax our neural pathways and free them up for layered and multi-dimensional growth.

Adults encourage children to explore playfully when environments are thoughtfully prepared with playful inquiry in mind. But opportunities increase when adults approach their own work from a stance of playful exploration themselves. Adults can observe children with these questions in mind:

- What environments, experiences or materials elicit the greatest delight?
- What environments, experiences or materials sustain children's interests and play for the longest periods of time?
- What questions do children seem to be asking within the environment?
- What environments or experiences tend to invite the most collaboration between children?

Based on these observations, how can we create new possibilities for joy, wonder and inspiration?

Adults can support children to ... **Seek Connections.**

A connection feels like a hole in your heart that has just been filled.

—Olive, age 8

We have come to believe that the quality of our learning is determined by the quality of our relationships -- our ability to have them with others, and our ability to perceive them in our world. Without question, children benefit from the support of a caring adult who is willing to enter into a genuine relationship. Respect, trust, and love lay the foundation for the emotional state most conducive for the learning brain. But, equally important is the support we give to children for *seeing* relationships, patterns, and connections in the world. Definitions of creativity are hard to pin down, but all have a similar theme: crossing boundaries, seeing relationships other people haven't noticed, and the ability to make novel connections between old familiar parts (Pink, 2005; Rinaldi,

2005; Robinson, 2001). Playful inquiry thrives in an environment rich with possibilities for the arts, sciences, and language.

Creative work is play... The creative mind plays with the object it loves. Artists play with color and space. Musicians play with sound and silence. Children play with everything they can get their hands on.

—Stephen Nachmanovitch, 1990

There are many opportunities to support and encourage connections between children, teachers, families, materials, the natural world, and ideas. Connections are the building blocks that strengthen creativity and are one of the most powerful learning tools supported by playful inquiry. Adults invite children to discover connections and relationships when environments support children to slow down and get lost in their play. Important connections range from concrete and hands-on work with materials, to abstract ideas conveyed through themes and activities. Children may make connections with clay, blocks, or by manipulating a water flow. They make connections when they engage in spontaneous and improvisational theater in a dramatic play area. They make connections when they consider the many shades of green they can make with watercolor paint after spending time observing the ferns in the forest. They make connections when they experience big ideas between books and songs. Connections help create complex wiring in our brains.

In order to support children's innate drive to connect, see, and create relationships, adults can provide a child with loose parts (for example, blocks, found objects, natural materials), art materials and time to tinker. They can appreciate and encourage the use of metaphor. And adults can talk with children about what they see. They can marvel over and celebrate novel ideas, and delight in children's tremendous capacity to create them.

Adults can encourage children to ... **Share Stories.**

Stories are how we remember, how we think, how we communicate, how we understand. In his book, *The Literary Mind*, cognitive scientist Mark Turner writes, "Story is the fundamental instrument of thought" (in Pink, 2005, p. 101).

Opportunities for playful inquiry are enhanced within environments that contain abundant invitations for story making and story sharing. Stories are how we take the parts of our lives and make a meaningful whole.

Over time, in our memories, the story of our life becomes our life. Playful inquiry opens the door for that story to be defined by success and contentment. In 2002, psychologist Jerome Bruner told an audience in Reggio Emilia, Italy, that children learn the syntax of language in order to tell stories. It is important that we listen to them.

It is equally important that adults tell children their own stories. Adults can put children on their laps and transport them through time and space with those found in books. And when children grow too big adults can sit side by side, eye to eye, arm in arm – and keep the reading and telling of stories alive in a child's world.

Remember this one thing, said Badger. The stories people tell have a way of taking care of them. If stories come to you, care for them. And learn to give them away where they are needed. Sometimes a person needs a story more than food to stay alive. That is why we put these stories in each other's memories. This is how people care for themselves.

—Barry Lopez, Crow and Weasel (1998)

Open-ended environments such as dramatic play and block spaces, forts or other shelters, or child-sized versions of familiar places like grocery stores or doctors' offices, naturally lend themselves to rich storytelling and imagining.

Adults also have the opportunity to tell the stories of their own experience through the documentation of playful inquiry. By taking the time to photograph and narrate stories of experiences and observations, adults can make visible their professional interpretations of the importance of those experiences. Quotes, photographs, and narrative accounts have the effect of slowing down an event so that it is easier to appreciate. Moments of playful inquiry are filled with treasures to last a lifetime. Documentation offers adults a tool to stop motion, to shine a light on those treasures and to let them sparkle. When carefully displayed, these stories and photographs allow adults a concrete connection to the importance of play for the children they care for. As Badger

advises us to do—we can put these stories in each other’s memories. They will help us take care of ourselves.

Adults can ... **Nurture Empathy.**

Empathy is that incredible human capacity to imagine ourselves standing in someone else’s shoes. Empathy is what allows us to connect with other human beings and to experience the meaning and joy in knowing we are not alone. Empathy is what allows us to live by the golden rule. When we are empathetic to another’s experience, it is impossible to do what we would not have done to ourselves. The challenge to imagine other perspectives, to seek connection between our own stories and those of people whose experiences are very different from our own, is at the very heart of genuine inquiry and one of its most powerful uses. In her 2008 Harvard commencement address, the author of the Harry Potter series, JK Rowling, spoke of the power of empathy:

Unlike any other creature on this planet, humans can learn and understand, without having experienced. They can think themselves into other people's minds, imagine themselves into other people's places.

... many prefer not to exercise their imaginations at all. They choose to remain comfortably within the bounds of their own experience, never troubling to wonder how it would feel to have been born other than they are. They can refuse to hear screams or to peer inside cages; they can close their minds and hearts to any suffering that does not touch them personally; they can refuse to know.

I might be tempted to envy people who can live that way, except that I do not think they have any fewer nightmares than I do. ... I think the willfully unimaginative see more monsters. They are often more afraid.

What is more, those who choose not to empathize may enable real monsters. For without ever committing an act of outright evil ourselves, we collude with it, through our own apathy.

We enable healthy relationships when we support and encourage children’s social play and collaborative work. Adults can make emotions visible by naming

them and being curious about the behaviors associated with them. We can try to ask questions before we jump to conclusions. It makes sense to invest in a child's social and emotional intelligence as an integral and vital part of creativity, intellect, and healthy development. Adults model caring by listening to children, and asking questions about the interpretations he or she makes of experiences. Adults can talk with children about the things they care about and let children see what it looks like to take action on behalf of those things. Adults provide critical support for children to build awareness of unfairness in this world and for helping a child learn to cope with and respond to it appropriately.

No human being can achieve his full potential if his creativity is stunted in childhood. And no nation can thrive in the 21st century without a highly creative and innovative workforce. Nor will democracy survive without citizens who can form their own independent thoughts and act on them.

-Miller and Almon

If the guiding principles for supporting and promoting playful inquiry seem pretty simple, and maybe even a little old-fashioned, it's because they are. As it turns out, these simple things—telling stories, connecting with one another, being curious about the world, seeking meaning, and even being good to one another (Goleman), are hard-wired into our species. In other words, we're not broken—but some of our current systems most certainly are. In our efforts to organize, industrialize, strategize, standardize—we've lost our way, and we've obscured the creative birthright of many who've happened along. Placing a value on our natural learning strategies in our communities and our institutions will help shift our culture towards a sustainable future.

To be responsive to a child's innate sense of wonder is to help choreograph a life-long dance with the world that we experience and create as we live out our lives. Environments steeped in playful inquiry support children to grow into adults who have an understanding of their own capacities—whose minds have richly developed pathways layered with possibilities for new and flexible connections. These are minds that can solve complex problems, invent novel solutions, imagine another's perspective, and communicate with confidence and competence. These are the kinds of minds that create peaceful, sustainable, and happy communities.

For those who would be neuroscientists, a love of mathematics and technology (and time to play) might lead to the kinds of studies that are beginning to connect the relationships between the use of the arts and general cognition. Such scientists are finding that the study of music and drama support strong neural strategies for long-term memory (Jonides, 2008). Others have found connections between the study of music and the development of attention (Neville, 2008). Still others have found that genetic pre-dispositions to certain art forms lead to high interest and competence in those art forms (Posner, 2008). In other words, it turns out that Nachmanovitch was right: the creative mind plays with the object it loves (1990).

For those who would be educators, a love of learning (and time to play) might lead to the kind of recognition that Elliot Eisner makes visible when he writes:

The aim of education ought to be conceived as the preparation of artists...individuals who have developed the ideas, the sensibilities, the skills and the imagination to create work that is well proportioned, skillfully executed, and imaginative, regardless of the domain in which an individual works. The highest accolade we can confer upon someone is to say that he or she is an artist whether as a carpenter or a surgeon, a cook or an engineer, a physicist, or a teacher. The fine arts have no monopoly on the artistic.

For those who would be poets, a love of words (and time to play) might lead to the kind of questions Mary Oliver posed in her poem, *The Summer Day*:

*Tell me, what else should I have done?
Doesn't everything die at last, and too soon?
Tell me, what is it you plan to do
with your one wild and precious life?*

Or the advice that 10-year-old Byron offers in his poem:

*Curiosity Killer
Curiosity should not be killed.
It's made to ponder, to explore.
Get to a place
Where your mind can wander.
Ponder the unpondered
Questions.*

Both poets invite us into a playful inquiry that inspires us to muse on our opportunities and our choices. What are we willing to imagine? To wonder? To dream?

There is a vitality, a life force, an energy, a quickening, that is translated through you into action, and because there is only one of you in all time, this expression is unique. And if you block it, it will never exist through any other medium and will be lost.

Martha Graham, Dancer and Choreographer
in Nachmanovitch

Playful inquiry is the means to tapping into a child's energy, and unblocking every child's capacity for expression. When learning environments promote playful inquiry, our communities will benefit from the voices of children now, and launch into the future citizens that have the creativity, the curiosity, and the care to live happy, healthy lives with one another.

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Overview of Reading Developmental Continuum

Beyond the Roleplay phase the children are said to be working in a particular phase when the Global Statement and Key Indicators represent the best fit with the child's behaviours and beliefs. Children need not display all key indicators to be placed in a phase, the placement rests upon the teacher's professional judgement.

Phases

Phase 1: Role Play Reading

In this phase readers display reading-like behaviour as they reconstruct stories for themselves. They show a natural interest in books and the language of print.

Phase 2: Experimental Reading

In this phase readers use memory of familiar texts to match some spoken words and written words. They realise that print contains a constant message and begin pointing to words. They may comment on pictures, but seldom question written text.

Phase 3: Early Reading

In this phase readers may read unfamiliar texts slowly and deliberately as they focus on reading exactly what is on the page. Readers are beginning to reflect on their own strategies, e.g. for working out unknown words. They sometimes comment on and question texts.

Phase 4: Transitional Reading

In this phase readers are beginning to integrate a range of reading strategies to make meaning. They are becoming more confident in using a variety of strategies to identify and comprehend words. They are able to adapt their reading to different types of text. Readers in this phase enjoy challenges, e.g. "I'm going to read this hard book. I like lots of hard words." Although books may influence their thinking, they may not be consciously aware of this. With teacher support they will comment on and criticise texts.

Phase 5: Independent Reading

Reading is purposeful and automatic. Readers are only aware of reading strategies being employed when encountering difficult text or reading for a specific purpose. Readers have greater ability to make connections between what is current knowledge and what is new. They may challenge texts, drawing on evidence from their own experience.

Phase 6: Advanced Reading

Key Indicators

- displays reading-like behaviour
 - holding the book the right way up
 - turning the pages appropriately
 - looking at words and pictures
 - using pictures to construct ideas
- realises that print carries a message but may read the writing differently each time, e.g. when 'reading' scribble to parents
- focuses on the meaning of a television program, story, or other text viewed, listened to or 'read'. Responses reflect understanding.
- makes links to own experience when listening to or 'reading' books, e.g. points to illustration, saying 'My dog jumps up too.'
- uses pictorial and visual cues when watching television, listening to or 'reading' stories, i.e. talks about a television program, advertisement or picture in a magazine or book, relating it to own knowledge and experience
- recognises own name, or part of it, in print

- realises that print contains a constant message, i.e. that the words of a written story remain the same, but the words of an oral story may change
- is focused on expressing the meaning of a story rather than on reading words accurately
- uses prior knowledge of context and personal experience to make meaning, e.g. uses memory of a text to match spoken with written words
- recognises some personally significant words in context, e.g. in job roster, weather chart or books
- matches some spoken words with written words when reading a book or environmental print

- is beginning to read familiar texts confidently and can retell major content from visual and printed texts, e.g. language experience recounts, shared books, simple informational texts and children's television programs
- can identify and talk about a range of different text forms such as letters, lists, recipes, stories, newspaper and magazine articles, television dramas and documentaries
- demonstrates understanding that all texts, both narrative and informational, are written by authors who are expressing their own ideas
- may read word-by-word or line-by-line when reading an unfamiliar text, i.e. reading performance may be word centred. Fluency and expression become stilted as the child focuses on decoding
- uses pictures cues and knowledge of context to check understanding of meaning
- has a bank of words which are recognised when encountered in different contexts, e.g. in a book, on the blackboard, in the environment or on a chart
- relies heavily on beginning letters and sounding-out for word identification (graphophonic strategies)

- shows an ability to construct meaning by integrating knowledge of:
 - text structure, e.g. letter, narrative, report, recount, procedure
 - text organisation, e.g. paragraphs, chapters, introduction, conclusion, contents, page, index
 - language features, e.g. descriptive language connectives such as because, therefore, if... then
 - subject specific language, e.g. the language of reporting in science and the language of a journalistic report
- can retell and discuss own interpretation of texts read or viewed with others, providing information relating to plot and characterisation in narrative or to main ideas and supporting detail in informational text
- recognises that characters can be stereotyped in a text, e.g. a mother looking after children at home, while the father goes out to work or a prince rescuing a helpless maiden from an evil stepmother, and discusses how this could be changed
- selects appropriate material and adjusts reading strategies for different texts and different purposes, e.g. skimming to search for a specific fact; scanning for a key word

- is becoming efficient in using most of the following strategies for constructing meaning:
 - makes predictions and is able to substantiate them
 - self-corrects when reading
 - re-reads to clarify meaning
 - reads-on when encountering a difficult text
 - slows down when reading difficult texts
 - substitutes familiar words
 - uses knowledge of print conventions
- makes meaningful substitutions, i.e. replacement miscues are meaningful, e.g. 'cool' drink for 'cold' drink. The integration of the three cuing systems (semantic, syntactic and graphophonic) is developing
- has an increasing bank of sight words, including some difficult and subject-specific words, e.g. science, experiment, February, Christmas
- is becoming efficient in the use of the following word identification strategies for constructing meaning:
 - sounds-out to decode words
 - uses initial letters as a cue to decoding
 - uses knowledge of common letter patterns to decode words, e.g. th, tion, scious, ough
 - uses known parts of words to make sense of the whole word
 - uses blending to decode words, e.g. str-ing
 - uses word segmentation and syllabification to make sense of whole word
- is able to talk about some of the strategies for making meaning.

- can recognise and discuss the elements and purposes of different text structures, e.g. reports, procedures, biographies, narratives, advertisements, dramas, documentaries
- reads and comprehends text that is abstract and removed from personal experience
- makes inferences based on implicit information drawn from a text and can provide justification for these inferences
- returns purposefully to make connections between widely separated sections of a text
- makes critical comparisons between texts
- can discuss an alternative reading of a text and offer possible reasons why a text may be interpreted differently by different readers or viewers
- uses a range of strategies automatically when constructing meaning from text
 - self-corrects
 - re-reads
 - reads-on
 - slows down
 - sub-vocalises
- uses word identification strategies appropriately and automatically when encountering an unknown word
 - knowledge of graphophonics
 - knowledge of word patterns
 - knowledge of word derivations
 - morphographs, prefixes, suffixes and syllabification

Major Teaching Emphases

- encourage discussion and praise critical and divergent thinking
- provide picture books with limited text that children can 'read' to themselves and others
- re-read favourite stories and rhymes
- share 'Big Books' with children incidentally modelling reading behaviours
- establish a language-rich environment, presenting print in natural and meaningful contexts
- read from an enlarged text (big book) so that children can follow the print as it is read
- read texts featuring rhyme, rhythm and repetition

As the opportunities arise:

- show that a written word is a unit of print with space either side
- talk about letters by name, relating initial letters to the sounds they represent
- show that print is written left to right and top to bottom
- relate spoken to written words in context
- draw attention to relationships between words and pictures
- demonstrate use of context cues to construct meaning

Major Teaching Emphases

- share with children times when you challenge or disagree with a text
- discuss instances of stereotyping in texts
- value and encourage both critical and empathetic responses from children, especially those that are different from your own
- Before, during and after reading promote discussion that goes beyond the literal level
- provide opportunities for children to retell stories
- use environmental print purposefully each day
- select reading material that is predictable, familiar and has natural repetition
- discuss conventions of print informally when reading
- model reading strategies such as predicting words and reading-on
- involve children in oral cloze activities focusing on words
- talk about letters and words in context, pointing out distinctive features
- encourage children to explore letter-sound relationships

Major Teaching Emphases

- ask readers about ideas and information they have found in books. Encourage a range of opinions and reactions, discuss stereotypes and generalisations
- provide opportunities for individual conferences where students discuss aspects of their reading
- provide opportunities for students to demonstrate understanding of a text
- encourage students to reflect on personal reading strategies
- model strategies such as substituting, re-reading, and self-correcting during shared reading sessions
- Encourage use of personal experiences, knowledge of oral language patterns and text structure to help readers make meaning
- model strategies for attacking unknown words, e.g. identifying similar word beginnings, common word patterns, chunking parts of a word
- support the development of a basic sight vocabulary by:
 - selecting resources that use many of these words in a natural way
 - encouraging readers to re-read favourite books
 - scribing the students' own language and using this text to focus on basic sight words
 - developing class word banks containing topic words, high frequency words, linking words etc.

Major Teaching Emphases

- create a climate which fosters critical thinking
- help students to be aware of the view of the world presented by an author and how this affects different people
- discuss with students the effect of texts on their own attitudes and perceptions
- ensure that students read a range of texts for a variety of purposes
- discuss the use of prior knowledge of:
 - the text topic
 - text structures
 - language appropriate for different text types
- Provide opportunities for:
 - making comparisons with other texts
 - identifying the main issues in a text and providing supporting detail
 - identifying cause and effect and predicting outcomes
 - identifying character traits from textual cues
 - analysing plots
 - interpreting symbolic or metaphorical meaning
 - discussing concepts and vocabulary
 - extracting and organising information

- Model and discuss
 - prediction and confirmation strategies
 - use of syntactic and semantic cues
 - use of picture cues
 - use of context cues
 - re-reading
 - reading-on
 - substituting words
- Model and discuss word identification strategies:
 - use of graphophonic knowledge and 'sounding-out'
 - blending
 - letter and word patterns
 - sight words
 - using syllabification and segmentation
 - using knowledge of root words and word components

Major Teaching Emphases

- teach students to:
 - articulate their reading difficulties
 - discuss the questions they asked of the text and any questions that weren't answered
 - discuss how they solved problems
 - select and use appropriate strategies when reading for different purposes
- praise and encourage students when they show evidence of critical reading, listening and responding sensitively to their comments
- teach students to identify and comment on differing points of view in texts
- establish a language-rich environment presenting print in natural and meaningful contexts
- provide opportunities for students to examine, analyse and discuss narrative and expository texts
- teach students to:
 - analyse topics/questions
 - generate self-questions
 - select appropriate texts and compile reference lists
 - summarise and take notes
 - organise responses for reporting
 - compile bibliographies
- develop the students' ability to read from a writer's viewpoint and to write from a reader's viewpoint

At all phases:

- foster children's enjoyment of reading, encouraging them to explore a variety of texts and take risks with confidence
- read to students every day and share your own enjoyment of reading
- encourage students to respond critically to texts they have read or viewed
- model reading behaviours and strategies for students to emulate
- encourage students to select their own books and read independently every day
- encourage students to share experiences related to reading and viewing
- talk to students about their reading and viewing
- provide opportunities for students to write every day for different purposes and audiences



Overview of the *First Steps* Writing Map of Development

Global Statement	Role Play Phase	Experimental Phase	Early Phase	Transitional Phase
Key Indicators	<p>In this phase, writers emulate adult writing by experimenting with marks to represent written language. Role Play writers are beginning to understand that writing is used to convey meaning or messages; however, as understandings about sound-symbol relationships are yet to develop, their messages are not readable by others. Role Play writers rely heavily on topic knowledge to generate text.</p> <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Assigns a message to own written and drawn symbols Demonstrates awareness that writing and drawing are different Knows that print carries a message, but may read writing differently each time <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> States purpose or audience for own writing, e.g., This is a card for Dad. Identifies and talks about characters from literary texts Identifies and talks about people and ideas in informational texts <p>CONVENTIONS</p> <ul style="list-style-type: none"> Begins to demonstrate an awareness of directionality, e.g., points to where print begins Uses known letters or approximations of letters to represent writing <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Relies upon personal experiences as a stimulus for writing 	<p>In this phase, writers are aware that speech can be written down. Experimental writers rely on familiar topics to generate a variety of texts, such as greeting cards, lists, and letters. They demonstrate an understanding of one-to-one correspondence by representing most spoken words in their written texts. These words may consist of one, two, or three letters, and reflect their developing understanding of sound-symbol relationships.</p> <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Experiments with familiar forms of writing, e.g., lists, captions, retellings Uses writing with the intention of communicating a message Demonstrates awareness that print contains a constant message, e.g., recalls the gist of the message over time With assistance, finds information in texts appropriate to purpose or interest <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> Provides reasons why people write, e.g., to remember, to say thank you. States the purpose and audience of own writing, e.g., I am going to write to Grandma to say... Talks about how characters and events are represented in literary texts Talks about how people and ideas are represented in informational texts <p>CONVENTIONS</p> <ul style="list-style-type: none"> Writes using simple language structures, e.g., I like..., I see... Demonstrates one-to-one correspondence between written and spoken word, e.g., word-pointing when reading back own writing Begins to demonstrate understanding of the conventions of print Identifies the letters of the alphabet by name or by common sounds <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Draws upon semantic, graphophonic, and syntactic knowledge when writing, e.g., topic knowledge, sound-symbol relationships Uses a limited range of strategies throughout the writing process, e.g., connecting Uses a limited range of strategies to spell, e.g., sounding out Decides how own text will be presented 	<p>Early writers produce a small range of texts that exhibit some of the conventions of writing. Texts, such as retellings, reports, and e-mails, are composed to share experiences, information, or feelings. Early writers have a small bank of frequently used words that they spell correctly. When writing unknown words, they choose letters on the basis of sound, without regard for conventional spelling patterns.</p> <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Attempts a small range of familiar texts, either teacher directed or self selected With assistance, finds information in texts and records through drawing or writing key words <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> Explains the purpose of a small range of familiar text forms, e.g., jokes are to entertain Talks about the purpose of a piece of writing and the ideas that need to be included Explains why characters or events are represented in a particular way when composing literary texts Explains why people or ideas are represented in a particular way when composing informational texts Imitates the use of simple devices used in texts, e.g., print size, colour <p>CONVENTIONS</p> <ul style="list-style-type: none"> Experiments with words drawn from a variety of sources, e.g., literature, media, oral language of peers Spells and uses a small bank of known words correctly Knows all letters by name and their common sounds Knows simple letter patterns and the sounds they represent, e.g., sh, ch, ee Writes simple sentences using correct punctuation <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Draws upon semantic, graphophonic, and syntactic knowledge when writing, e.g., text organization, word order Uses a small range of strategies throughout the writing process, e.g., self-questioning Uses a small range of strategies to spell unknown words, e.g., chunking, sounding out Talks or draws as a means of planning before writing Begins to edit and proofread own writing when directed, e.g., deleting words, adding punctuation Creates a published text that is beginning to reflect the intended purpose 	<p>Transitional writers show increasing control over the conventions of writing such as punctuation, spelling, and text organization. They consider audience and purpose when selecting ideas and information to be included in texts. They compose a range of texts, including explanations, narratives, brochures, and electronic presentations. Writing shows evidence of a bank of known words that are spelled correctly. Transitional writers are moving away from a heavy reliance on sounding out and are beginning to integrate visual and meaning-based strategies to spell unknown words.</p> <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Composes a range of texts, but may not fully control all elements Composes texts by finding, recording, and organizing information appropriate to purpose <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> Explains the purpose and audience of a range of text forms Selects ideas to include in own text to suit purpose and audience Discusses alternatives about how to represent characters and events when composing literary texts Discusses alternatives about how to represent people and ideas when composing informational texts Experiments with the use of devices, e.g., repetition of words or phrases <p>CONVENTIONS</p> <ul style="list-style-type: none"> Varies vocabulary to add interest Spells and uses an increasing bank of known words correctly Knows less common letter patterns and the sounds they represent, e.g., tion, ph Writes a variety of simple and compound sentences, using correct punctuation Groups related information, sometimes without regard for paragraphing conventions <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Draws upon semantic, graphophonic, and syntactic knowledge when writing, e.g., vocabulary knowledge, text-structure knowledge Uses an increasing range of strategies throughout the writing process, e.g., determining importance Uses an increasing range of strategies to spell unknown words, e.g., using visual memory Begins to organize ideas before writing, e.g., brainstorming, drawing, jotting Revises, edits, and proofreads own writing when directed Plans for and creates a published text that reflects the intended purpose and needs of the audience
Major Teaching Emphases	<p>ENVIRONMENT AND ATTITUDE</p> <ul style="list-style-type: none"> Create a supportive classroom environment that nurtures a community of writers. Foster students' enjoyment of writing. Encourage students to experiment with different facets of writing, e.g., using known letters, composing messages. Encourage students to value writing as a social practice. <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Expose students to a range of text forms pointing out purpose, e.g., recipes tell how to make something. Provide opportunities for students to write a range of texts for authentic purposes and audiences. Model the connection between oral and written language, e.g., what is said can be written down. Demonstrate that written messages remain constant. Foster students' sense of voice and individual writing style. Teach students the metalanguage associated with writing, and encourage its use. <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> Discuss that writing has a purpose and an intended audience. Draw students' attention to decisions writers make when composing texts. Draw students' attention to the way characters are represented in literary texts. Draw students' attention to the way people and ideas are represented in informational texts. <p>CONVENTIONS</p> <ul style="list-style-type: none"> Provide opportunities for students to develop and use new vocabulary. Begin to build the bank of words students can automatically spell and use, e.g., personally significant words. Build phonological awareness and graphophonic knowledge, such as <ul style="list-style-type: none"> recognizing, matching, and generating rhymes listening for sounds in words linking letter names with their sounds, focusing on the regular sound Teach students the conventions of print. Model one-to-one correspondence between written and spoken words. Model the composition of simple sentences, including the use of punctuation, e.g., capital letters, periods. <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Build students' semantic, graphophonic, and syntactic knowledge, e.g., topic knowledge, sound-symbol relationships. Teach strategies used throughout the writing process, e.g., connecting. Teach spelling strategies, e.g., sounding out. Model simple publishing alternatives, e.g., text and illustration. Model how to find required information in texts. Model how to reflect on the writing process and products, and encourage students to do the same. 	<p>ENVIRONMENT AND ATTITUDE</p> <ul style="list-style-type: none"> Create a supportive classroom environment that nurtures a community of writers. Foster students' enjoyment of writing. Encourage students to experiment with different facets of writing, e.g., spelling, composing sentences. Encourage students to value writing as a social practice. <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Continue to expose students to a range of text forms, pointing out purpose and audience. Provide opportunities for students to compose a range of texts for authentic purposes and audiences. Foster students' sense of voice and individual writing style. Continue to teach students the metalanguage associated with writing, and encourage its use. <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> Discuss the purpose and audience of a range of text forms. Discuss some of the decisions writers make when composing texts, and provide opportunities for students to do the same. Draw students' attention to the different ways characters or events are represented in literary texts. Draw students' attention to the different ways people or ideas are represented in informational texts. Highlight and encourage the use of simple devices that writers use to influence readers, e.g., print size, colour. <p>CONVENTIONS</p> <ul style="list-style-type: none"> Provide opportunities for students to develop and use new vocabulary. Continue to build the bank of words students can automatically spell and use, e.g., high-frequency words. Build students' knowledge about words and word parts, e.g., plurals. Continue to build phonological awareness and graphophonic knowledge, such as <ul style="list-style-type: none"> segmenting words into sounds linking letters with their regular sounds representing sounds heard in words with letters written in the order they are heard recognizing that the same letter represents different sounds Reinforce conventions of print. Teach the use of commonly used punctuation, e.g., question marks, exclamation marks. Teach the use of parts of speech, e.g., nouns, verbs. Demonstrate the construction of sentences as units of meaning. Model how to group information that is related to compose a text. Begin to build students' knowledge about different text forms, e.g., procedures instruct, procedures have steps. <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Continue to build students' semantic, graphophonic, and syntactic knowledge, e.g., word order, text organization. Continue to teach strategies used throughout the writing process, e.g., self-questioning. Continue to teach spelling strategies, e.g., chunking. Model simple ways to plan for writing, e.g., talking, drawing. Model simple ways to edit and proofread, e.g., adding words or punctuation. Continue to model simple publishing alternatives, highlighting purpose. Model how to find, record, and organize information from texts, e.g., alphabetical order, simple retrieval chart. Model how to reflect on the writing process and products, and encourage students to do the same. 	<p>ENVIRONMENT AND ATTITUDE</p> <ul style="list-style-type: none"> Create a supportive classroom environment that nurtures a community of writers. Foster students' enjoyment of writing. Encourage students to experiment with different facets of writing, e.g., planning, editing, spelling. Encourage students to value writing as a social practice. <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Continue to expose students to a range of text forms, and discuss the features of each. Provide opportunities for students to compose a range of texts for authentic purposes and audiences. Foster students' sense of voice and individual writing style. Continue to teach students the metalanguage associated with writing, and encourage its use. <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> Discuss the purpose and audience of a range of text forms. Continue to discuss some of the decisions writers make when composing texts, and provide opportunities for students to do the same. Encourage students to make choices about how to represent characters and events when composing literary texts. Encourage students to make choices about how to represent people and ideas when composing informational texts. Model and encourage the use of devices, and discuss how they influence meaning. Model to teach students how to use writing to influence change about social issues that concern them. <p>CONVENTIONS</p> <ul style="list-style-type: none"> Provide opportunities for students to develop, refine, and use new vocabulary. Continue to build the bank of words students can automatically spell and use, e.g., topic words, signal words. Build students' knowledge about words and word parts, e.g., contractions, suffixes. Continue to build phonological awareness and graphophonic knowledge, such as <ul style="list-style-type: none"> representing the same sound with different letters or letter combinations, e.g., beach, me, ski, thief representing different sounds with the same letters or letter combinations, e.g., enough, though, through Continue to teach the use of punctuation, e.g., commas. Continue to teach the parts of speech and their relationships, e.g., subject-verb agreement. Teach students to construct and manipulate sentences, e.g., expanding, reducing, transforming. Model how to group together sentences with similar information. Continue to build knowledge of different text forms, emphasizing: <ul style="list-style-type: none"> purpose, e.g., reports describe text structure, e.g., reports list details text organization, e.g., reports use headings language features, e.g., reports use present tense <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Continue to build students' semantic, graphophonic, and syntactic knowledge, e.g., grammatical knowledge, cultural knowledge. Continue to teach strategies used throughout the writing process, e.g., determining importance. Continue to teach spelling strategies, e.g., using visual memory. Teach students to plan for writing in a variety of ways, e.g., brainstorming, classifying. Teach students how to use editing and proofreading to refine their writing. Continue to model a variety of publishing alternatives, highlighting the purpose and audience. Teach students how to find, record, and organize information from texts, e.g., note making, note taking. Model how to reflect on the writing process and products, and encourage students to do the same. 	<p>ENVIRONMENT AND ATTITUDE</p> <ul style="list-style-type: none"> Create a supportive classroom environment that nurtures a community of writers. Foster students' enjoyment of writing. Encourage students to experiment with different facets of writing, e.g., new forms, devices, vocabulary. Encourage students to value writing as a social practice. <p>USE OF TEXTS</p> <ul style="list-style-type: none"> Continue to expose students to a range of text forms, and discuss the features of each. Provide opportunities for students to craft a range of texts for authentic purposes and audiences. Foster students' sense of voice and individual writing style. Continue to teach students the metalanguage associated with writing, and encourage its use. <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> Discuss some of the reasons writers choose one particular text form over others. Encourage students to explain their decisions about <ul style="list-style-type: none"> text form selected information and ideas included or omitted language used Teach students how to represent characters and events to create specific effects in literary texts. Teach students how to represent people and ideas to create specific effects in informational texts. Teach students the use of devices, and discuss how they may influence the audience, e.g., flashback, illustration size. Encourage students to use writing to influence change about social issues that concern them. Discuss how writers' knowledge, experiences, and perspectives influence the composition of a text. <p>CONVENTIONS</p> <ul style="list-style-type: none"> Provide opportunities for students to develop, refine, and use new vocabulary. Continue to build the bank of words students can automatically spell and use, e.g., less common words, subject-specific words. Continue to build students' knowledge about words and word parts, e.g., prefixes, suffixes, homophones. Continue to build students' graphophonic knowledge, such as using less common sound-symbol relationships, e.g., ogan, nation, fashion. Extend students' knowledge of the use of punctuation, e.g., apostrophes, quotation marks. Extend students' knowledge and use of parts of speech and their relationships, e.g., noun-pronoun agreement. Teach students to construct and manipulate a variety of sentences, e.g., using conjunctions, using phrases and clauses. Teach students how to group sentences about similar information together to form a paragraph. Continue to build knowledge of different text forms, emphasizing <ul style="list-style-type: none"> purpose, e.g., explanations explain phenomena text structure, e.g., explanations use cause and effect text organization, e.g., explanations include diagrams or cutaways language features, e.g., explanations use signal words to show cause/effect <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> Continue to build students' semantic, graphophonic, and syntactic knowledge, e.g., world knowledge, linguistic features. Continue to teach strategies used throughout the writing process, e.g., synthesizing. Continue to teach spelling strategies, e.g., using analogy. Continue to teach students to plan for writing in a variety of ways, e.g., storyboards. Continue to teach students how to use revising, editing, and proofreading to refine their writing. Encourage students to select and use publishing formats that best suit purpose and audience, e.g., Web page, slide show, poster. Continue to teach students to find, record, and organize information from texts, e.g., using graphic organizers.



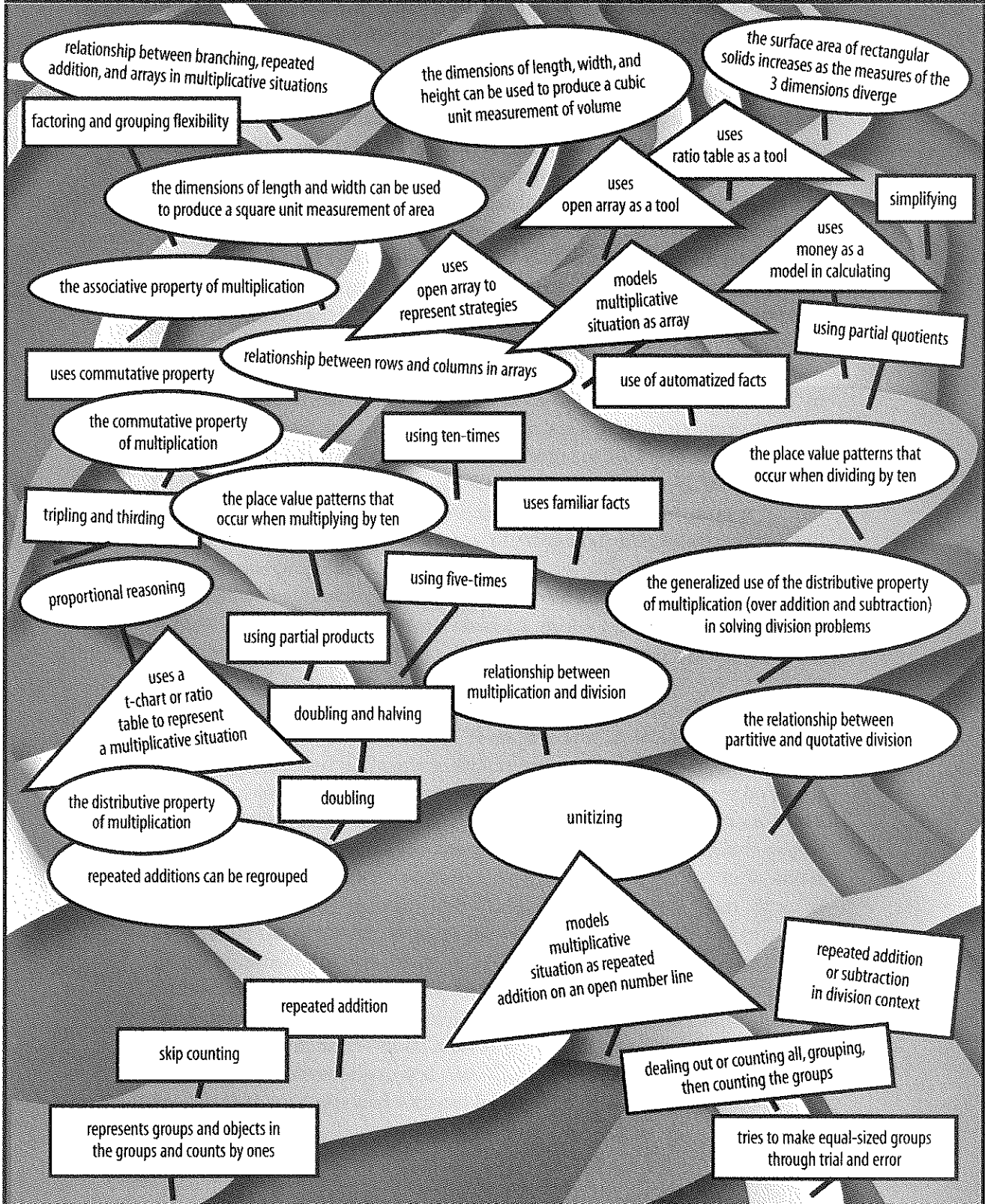


Overview of the *First Steps* Writing Map of Development

Global Statement	Conventional Phase	Proficient Phase	Accomplished Phase
Key Indicators	<p>Conventional writers demonstrate control over the conventions of writing and most components of the writing process. While composing, they take responsibility for adjusting the language and content to suit specific audiences and purposes. Conventional writers craft a variety of literary and informational texts, such as biographies, Web pages, and documentary scripts. In this phase, writers use an increasing bank of known words and select from a wide vocabulary. They integrate a range of strategies to spell unknown words.</p> <p>USE OF TEXTS</p> <ul style="list-style-type: none"> ♦ Crafts a wide range of texts, demonstrating control over all elements ♦ Composes texts by retrieving, recording, and organizing information appropriate to purpose and audience <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> ♦ Explains why a particular text form may be more appropriate to achieve a purpose for an intended audience ♦ Adjusts the language and ideas to include in own texts to suit purpose and audience ♦ Selects ways to represent characters and events to create specific effects in literary texts ♦ Selects ways to represent people and ideas to create specific effects in informational texts ♦ Uses devices when attempting to influence the reader, e.g., humour <p>CONVENTIONS</p> <ul style="list-style-type: none"> ♦ Selects vocabulary to create precise meaning ♦ Spells and uses a large bank of known words correctly ♦ Knows and uses less common letter patterns correctly, e.g., aisle, reign ♦ Writes a variety of simple, compound, and complex sentences using appropriate punctuation ♦ Develops a paragraph by writing a topic sentence and including supporting information <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> ♦ Draws upon semantic, graphophonic, and syntactic knowledge when writing, e.g., world and cultural knowledge, linguistic features ♦ Selects appropriate strategies to use throughout the writing process ♦ Selects appropriate strategies to spell unknown words ♦ Plans for writing in a range of ways, e.g., graphic organizers, storyboard ♦ Independently revises, edits, and proofreads own writing ♦ Selects appropriate text product types to enhance audience understanding and impact 	<p>Proficient writers demonstrate control over all components of the writing process. They understand how purpose and audience have impact on writing and are able to craft and manipulate texts to suit. They compose texts, such as research papers, newspaper articles, expositions, and hypertexts. Proficient writers are able to convey detailed information and explore different perspectives. They have developed an extensive vocabulary and use a multistrategy approach to spelling.</p> <p>USE OF TEXTS</p> <ul style="list-style-type: none"> ♦ Controls the crafting of a large repertoire of texts ♦ Critiques own texts by evaluating the information retrieved, recorded, and organized <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> ♦ Makes critical choices about the composition of a text to suit different purposes and to influence audiences ♦ Consciously provokes positive or negative responses through the representation of characters and events in literary texts ♦ Consciously provokes positive or negative responses through the representation of people and ideas in informational texts ♦ Selects devices designed to deepen impact or to influence a particular audience <p>CONVENTIONS</p> <ul style="list-style-type: none"> ♦ Selects vocabulary for its shades of meaning and effect ♦ Has accumulated an extensive bank of known words that are spelled and used correctly ♦ Is aware of the many letter patterns that are characteristic of the English spelling system ♦ Uses grammatically complex sentences appropriately and correctly ♦ Organizes paragraphs logically to form a cohesive text <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> ♦ Consciously adds to semantic, graphophonic, and syntactic knowledge as required, when writing ♦ Selects appropriate strategies to use throughout the writing process ♦ Accurately spells, using a multistrategy approach ♦ Plans for writing in efficient and effective ways ♦ Refines writing to deepen impact ♦ Makes critical choices about the publication of texts to suit different purposes and to create impact 	<p>Accomplished writers are able to make critical choices about all components of writing—including style, vocabulary, and content—as they craft a wide range of texts. They are able to develop complex ideas, sustain coherence, and present information clearly. Writers in this phase reflect on, evaluate, and critique their own writing to ensure that they have achieved their specific purpose for the intended audience.</p> <p>USE OF TEXTS</p> <ul style="list-style-type: none"> ♦ Controls the crafting of a large repertoire of texts ♦ Critiques own texts by evaluating the information retrieved, recorded, and organized ♦ Is able to write using a dispassionate style that conceals personal bias ♦ Is able to write using an emotive style that makes ideas more appealing ♦ Writes with conviction, using a strong personal voice ♦ Uses the metalanguage associated with writing <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> ♦ Makes critical choices about the composition of a text based on an analysis of the purpose and the intended audience ♦ Consciously provokes positive or negative responses through the representation of characters and events in literary texts ♦ Consciously provokes positive or negative responses through the representation of people and ideas in informational texts ♦ Selects devices designed to deepen impact or to influence a particular audience ♦ Recognizes how one’s values, attitudes, and beliefs have impact on the composition of a text ♦ Accommodates or resists the likely expectations of particular audiences <p>CONVENTIONS</p> <ul style="list-style-type: none"> ♦ Deliberately selects words to convey meaning economically and precisely ♦ Accurately spells a wide range of words ♦ Consciously selects sentence structure and associated punctuation to achieve impact ♦ Organizes ideas and information clearly, sustaining coherence throughout texts ♦ May choose to deviate from the conventions of writing to deepen impact <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> ♦ Consciously adds to semantic, graphophonic, and syntactic knowledge as required, when writing ♦ Selects appropriate strategies to use throughout the writing process ♦ Accurately spells, using a multistrategy approach ♦ Competently uses an extensive range of processes to plan, draft, and refine writing ♦ Makes critical choices about the publication of texts based on an analysis of the purpose and the intended audience
Major Teaching Emphases	<p>ENVIRONMENT AND ATTITUDE</p> <ul style="list-style-type: none"> ■ Create a supportive classroom environment that nurtures a community of writers. ■ Foster students’ enjoyment of writing. ■ Encourage students to experiment with different facets of writing, e.g., manipulating forms, use of devices. ■ Encourage students to value writing as a social practice. <p>USE OF TEXTS</p> <ul style="list-style-type: none"> ■ Continue to expose students to a range of text forms, and discuss the features of each. ■ Provide opportunities for students to craft a range of texts for authentic purposes and audiences. ■ Encourage students to experiment with the manipulation of elements to compose a text. ■ Foster students’ sense of voice and individual writing style. ■ Continue to teach students the metalanguage associated with writing, and encourage its use. <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> ■ Provide opportunities for students to explain their choice of text, information and ideas included or omitted, and devices used. ■ Encourage students to represent characters and events to create specific effects in literary texts. ■ Encourage students to represent people and ideas to create specific effects in informational texts. ■ Encourage students to select devices to influence a particular audience. ■ Encourage students to use writing to influence change about social issues that concern them. ■ Continue to discuss how writers’ and readers’ knowledge, experiences, and perspectives affect the composition and interpretation of texts. <p>CONVENTIONS</p> <ul style="list-style-type: none"> ■ Provide opportunities for students to develop, refine, and use new vocabulary. ■ Continue to build the bank of words students can automatically spell and use, e.g., technical terms. ■ Continue to build students’ knowledge about words and word parts, e.g., derivatives and word origins. ■ Extend students’ knowledge of the use of punctuation, e.g., colons, hyphens. ■ Extend students’ knowledge and use of parts of speech and their relationships, e.g., active and passive verbs. ■ Continue to teach students to construct and manipulate a variety of sentences. ■ Teach students different ways to develop cohesive paragraphs. ■ Continue to build knowledge of different text forms. ■ Build knowledge of texts where combinations and adaptations of text structure and organization have been used. <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> ■ Continue to build students’ semantic, graphophonic, and syntactic knowledge, e.g., orthographic knowledge, cultural knowledge. ■ Continue to teach strategies used throughout the writing process. ■ Consolidate known spelling strategies. ■ Encourage students to discuss the effectiveness of various ways they plan for writing. ■ Encourage students to use revising, editing, and proofreading to refine their writing. ■ Continue to encourage students to select and use text product types that best suit purpose and audience, e.g., Web site, video, portfolio. ■ Encourage students to evaluate their effectiveness in retrieving, recording, and organizing information from texts and to critique own texts. ■ Model how to reflect on the writing process and products, and encourage students to do the same. 	<p>ENVIRONMENT AND ATTITUDE</p> <ul style="list-style-type: none"> ■ Create a supportive classroom environment that nurtures a community of writers. ■ Foster students’ enjoyment of writing. ■ Encourage students to experiment with different facets of writing, e.g., creating hybrid texts, refining texts. ■ Encourage students to value writing as a social practice. <p>USE OF TEXTS</p> <ul style="list-style-type: none"> ■ Encourage students to explore and discuss a wide range of literary and informational texts. ■ Encourage students to craft a range of literary and informational texts for authentic purposes and audiences. ■ Encourage students to manipulate elements to craft a range of texts, e.g., hybrid texts, multimodal texts. ■ Foster students’ sense of voice and individual writing style. ■ Encourage students to independently use the metalanguage associated with writing. <p>CONTEXTUAL UNDERSTANDING</p> <ul style="list-style-type: none"> ■ Continue to provide opportunities for students to discuss the choices they have made when crafting texts, such as <ul style="list-style-type: none"> – text form – devices used to influence – the representation of people and ideas – the representation of characters and events ■ Encourage students to use writing to influence change about social issues that concern them. ■ Explore how the ideologies of the writer and the reader combine to create an interpretation of the text. <p>CONVENTIONS</p> <ul style="list-style-type: none"> ■ Encourage students to take responsibility for extending, refining, and using new vocabulary. ■ Reinforce to students their obligation to use spelling and grammar that is appropriate to the context. ■ Continue to teach students how to compose cohesive paragraphs and coherent texts. ■ Encourage students to build their knowledge of different text forms as required. ■ Continue to explore texts where combinations and adaptations of conventions have been used. <p>PROCESSES AND STRATEGIES</p> <ul style="list-style-type: none"> ■ Continue to build students’ semantic, graphophonic, and syntactic knowledge. ■ Consolidate strategies used throughout the writing process. ■ Consolidate spelling strategies. ■ Encourage students to be selective in the way they plan for writing. ■ Encourage students to refine their texts holistically to ensure that they are effective. ■ Encourage students to be selective in their choice of text product types ■ Continue to encourage students to evaluate their effectiveness in retrieving, recording, and organizing information from texts and to critique own texts. ■ Model how to reflect on the writing process and products, and encourage students to do the same. 	<p>Major Teaching Emphases and Teaching and Learning Experiences are not provided for this phase, as Accomplished writers are able to take responsibility for their own ongoing writing development.</p>

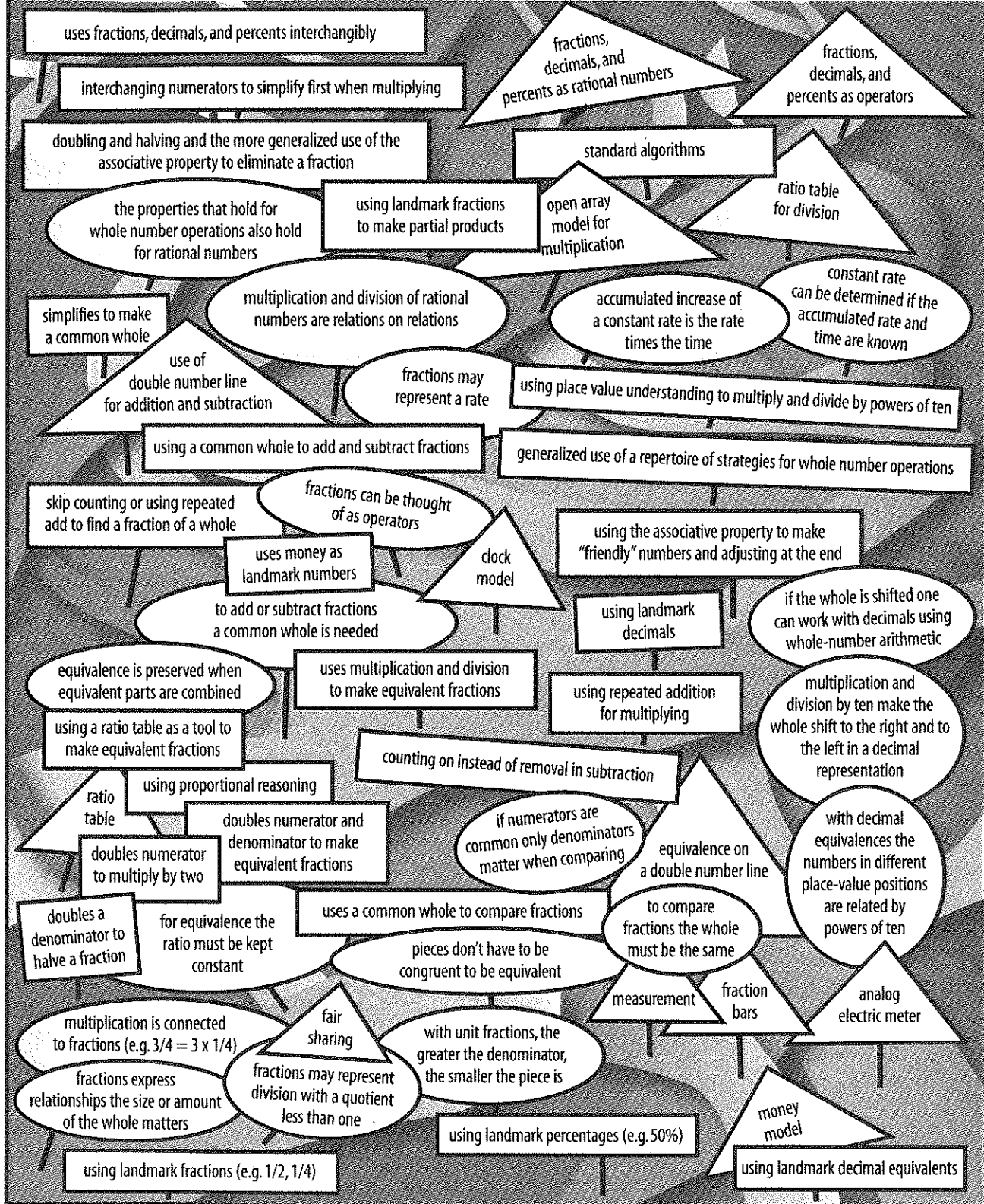


MULTIPLICATION/DIVISION

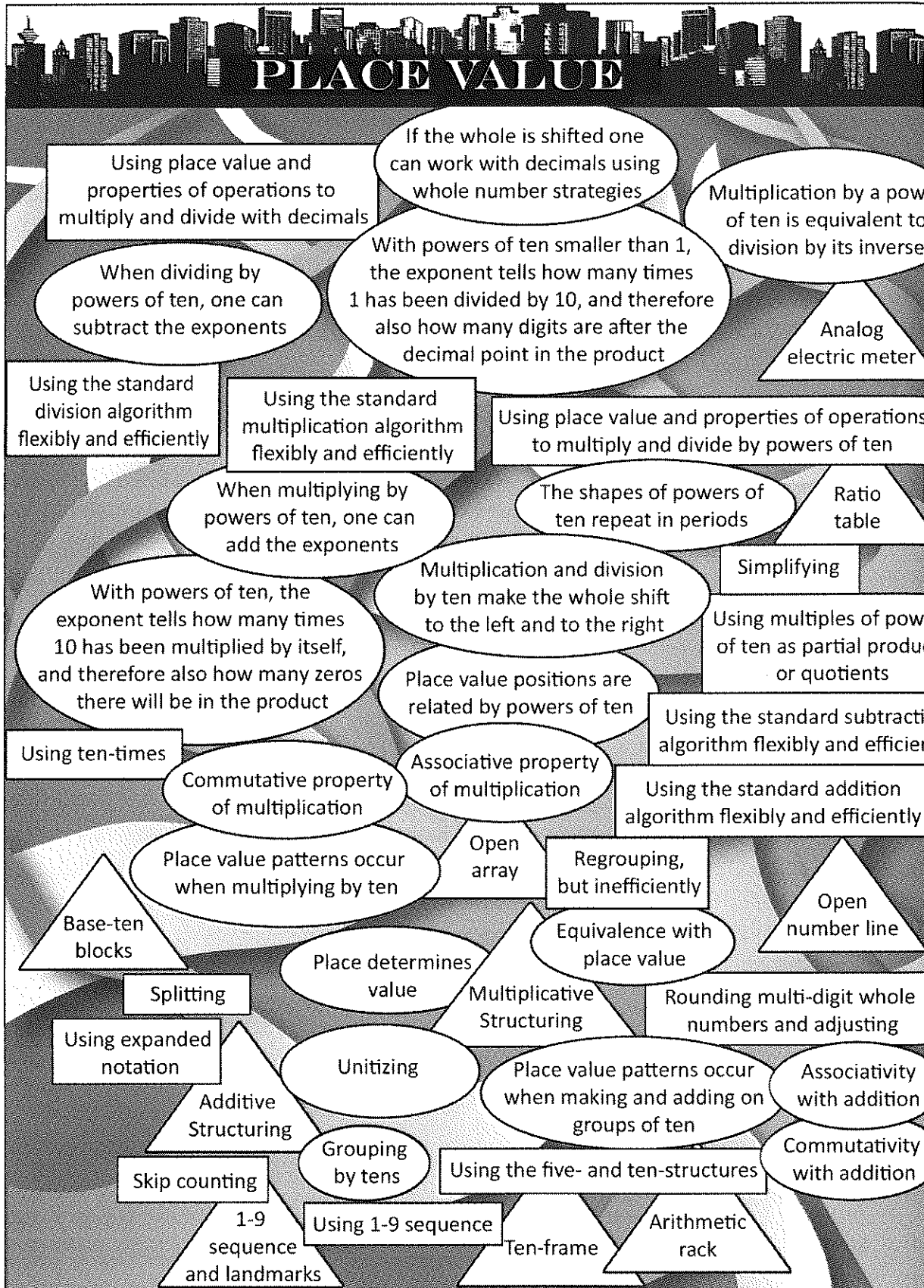


The landscape of learning: multiplication and division on the horizon showing landmark strategies (rectangles), big ideas (ovals), and models (triangles).

FRACTIONS, DECIMALS, and PERCENTS



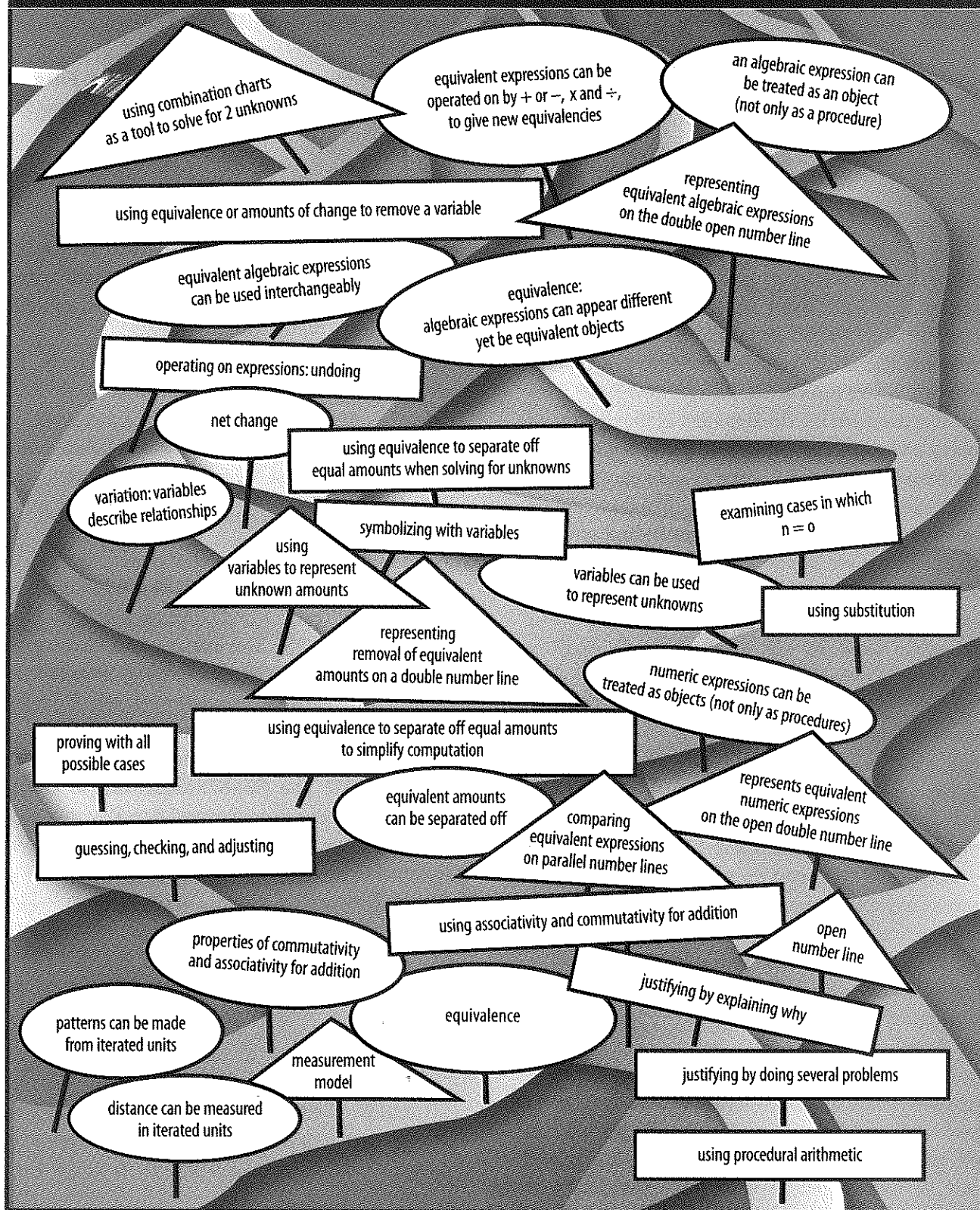
The landscape of learning: fractions, decimals, and percents on the horizon showing landmark strategies (rectangles), big ideas (ovals), and models (triangles).



The landscape of learning: place value on the horizon showing landmark strategies (rectangle), big ideas (ovals), and models (triangles).



ALGEBRA



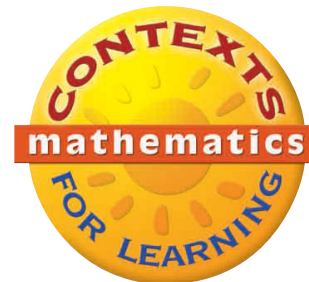
The landscape of learning: algebra on the horizon showing landmark strategies (rectangles), big ideas (ovals), and models (triangles).

Crosswalk Between Common Core State Standards for Mathematics

and

Contexts for Learning Mathematics

by Catherine Twomey Fosnot and Colleagues
from Mathematics in the City and the Freudenthal Institute



Investigating Number Sense, Addition, and Subtraction • GRADES K–3

Investigating Multiplication and Division • GRADES 3–5

Investigating Fractions, Decimals, and Percents • GRADES 4–6

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About the *Contexts for Learning Mathematics* Series

The new *Contexts for Learning Mathematics* series by Catherine Fosnot and her colleagues from Mathematics in the City and the Freudenthal Institute uses carefully crafted math situations to foster a deep conceptual understanding of essential mathematical ideas, strategies, and models. The series' 18 classroom-tested units are organized into 3 age-appropriate packages and are supported by resource guides, read-aloud books and posters, an overview book, and a resources CD-ROM.



Investigating Number Sense, Addition, and Subtraction (Grades K–3) supports the development of such fundamental topics as place value, compensation and equivalence, addition and subtraction on the open number line, and the efficient use of 5- and 10-structures.

Investigating Multiplication and Division (Grades 3–5) explores with increasing sophistication big ideas in multiplication and division, including systematic factoring and the distributive, associative, and commutative properties and their use in computation.

Investigating Fractions, Decimals, and Percents (Grades 4–6) examines fundamental topics such as equivalence of fractions, operations with fractions, proportional reasoning, rates, and the ordering of decimals.

Contexts for Learning Mathematics: Individual Titles

Because some teachers may want to mix and match units to fit the needs of their students, all of the unit books are available for purchase individually. The yearlong resource guides can also be purchased individually. To learn more about contents of individual titles, go to ContextsForLearning.com.

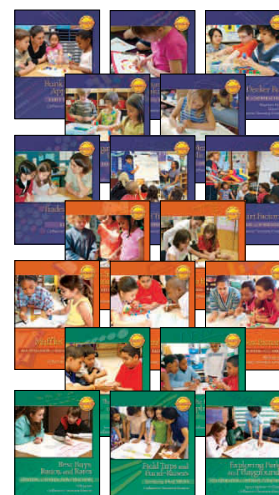
Resource Guides

Each resource guide is progressively structured, moving from fundamental strategies to more sophisticated operations. Together, these minilessons provide strings of related problems that develop students' deep number sense and expand their repertoire of strategies for mental arithmetic.



Unit Books

Unit books comprise a 2-week sequence of investigations, games, and minilessons that foster a deep conceptual understanding of essential mathematical ideas, strategies, and models. The context-setting texts, images, and teaching tools are provided in a reproducible format in the appendix of each book.



See page 21 for ordering information.

Kindergarten

Common Core State Standards for Mathematics

Counting and Cardinality

Count to tell the number of objects.

Understand the relationship between numbers and quantities; connect counting to cardinality.

- When counting objects, says the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- Understand that each successive number name refers to a quantity that is one larger.

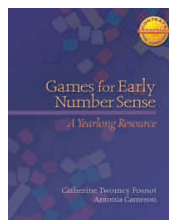
Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

Compare numbers.

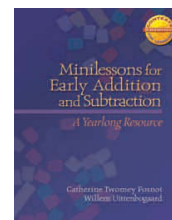
Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

Compare two numbers between 1 and 10 presented as written numerals.

Contexts for Learning Mathematics



Games for Early Number Sense: A Yearlong Resource



Minilessons for Early Addition and Subtraction: A Yearlong Resource

Resource units of games and brief minilessons can be used throughout the year as an integral part of math workshop and for differentiation as needed.

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Kindergarten

Common Core State Standards for Mathematics

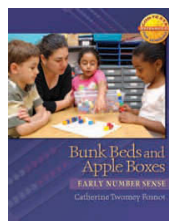
Operations & Algebraic Thinking

Understand addition as putting together and adding to, and subtraction as taking apart and taking from.

Decompose numbers less than or equal to 10 into pairs in more than one way, e.g. by using objects or drawings, and recording each decomposition by a drawing or equation (e.g. $5 = 2 + 3$ and $5 = 4 + 1$).

For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

Fluently add and subtract within 5.

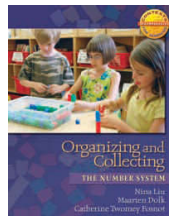


Bunk Beds and Apple Boxes: Early Number Sense

Number and Operations in Base Ten

Work with numbers 11–19 to gain foundations for place value.

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g. by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.



Organizing and Collecting: The Number System

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Grade 1

Common Core State Standards for Mathematics

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction.

Apply properties of operations as strategies to add and subtract. *Examples:* If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)

Understand subtraction as an unknown-addend problem. *For example,* subtract $10 - 8$ by finding the number that makes 10 when added to 8.

Add and subtract within 20.

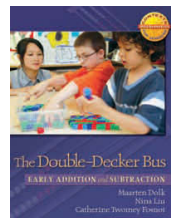
Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Work with addition and subtraction equations.

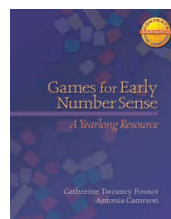
Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example,* which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.

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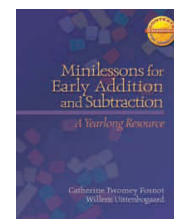
Contexts for Learning Mathematics



*The Double-Decker Bus:
Early Addition and Subtraction*



*Games for Early Number Sense:
A Yearlong Resource*



*Minilessons for Early
Addition and Subtraction:
A Yearlong Resource*

Resource units of games and brief minilessons can be used throughout the year as an integral part of math workshop and for differentiation as needed.

Grade 1

Common Core State Standards for Mathematics

Number and Operations in Base Ten

Extend the counting sequence.

Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

Understand place value.

Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

- 10 can be thought of as a bundle of ten ones—called a “ten.”
- The numbers from 11–19 are composed of a ten and a one, two, three, four, five, six, seven, eight, or nine ones.
- The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

Use place value understanding and properties of operations to add and subtract.

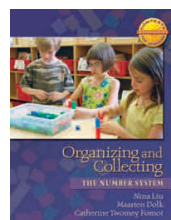
Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.

Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

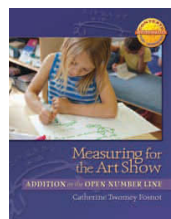
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Contexts for Learning Mathematics



*Organizing and Collecting:
The Number System*

Note: Can be used in K and repeated in 1 because the inventory this time is of a new classroom and the numbers provided of objects can be larger and differentiated to support development of individual learners.



*Measuring for the Art Show:
Addition on the Open
Number Line*

Grade 1

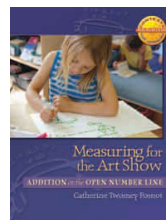
Common Core State Standards for Mathematics

Measurement and Data

Measure lengths indirectly and by iterating length units.

Order three objects by length; compare the lengths of two objects indirectly by using a third object.

Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.



Measuring for the Art Show: Addition on the Open Number Line

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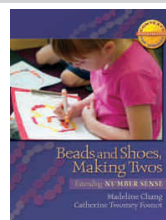
Grade 2

Common Core State Standards for Mathematics

Operations and Algebraic Thinking

Work with equal groups of objects to gain foundations for multiplication.

Determine whether a group of objects (up to 20) has an odd or even number of members, e.g. by pairing objects or counting by twos; write an equation to express an even number as the sum of two equal addends.



Beads and Shoes, Making Twos: Extending Number Sense

Number and Operations in Base Ten

Use place value understanding and properties of operations to add and subtract.

Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Add up to four two-digit numbers using strategies based on place value and properties of operations.

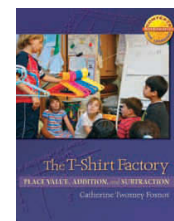
Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

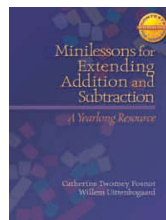
Explain why addition and subtraction strategies work, using place value and the properties of operations.



Ages and Timelines: Subtraction on the Open Number Line



The T-Shirt Factory: Place Value Addition, and Subtraction



Minilessons for Extending Addition and Subtraction: A Yearlong Resource

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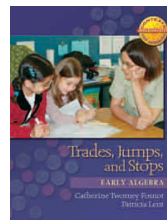
Grade 2

Common Core State Standards for Mathematics

Measurement and Data

Work with time and money.

Solve word problems involving dollar bills, quarters, dimes, nickels and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?



Trades, Jumps, and Stops: Early Algebra

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Grade 3

Common Core State Standards for Mathematics

Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division.

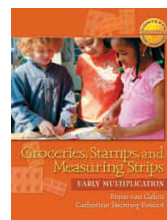
Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .

Understand properties of multiplication and the relationship between multiplication and division.

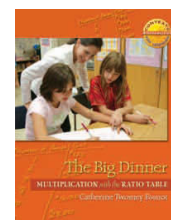
Apply properties of operations as strategies to multiply and divide. *Examples:* If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)

Multiply and divide within 100.

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations.

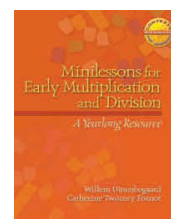


Groceries, Stamps, and Measuring Strips: Early Multiplication



The Big Dinner: Multiplication with the Ratio Table

Follow with *Minilessons for Early Multiplication and Division* and use throughout the year.



Minilessons for Early Multiplication and Division: A Yearlong Resource

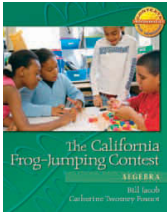
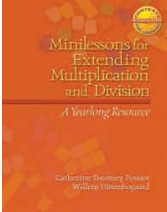
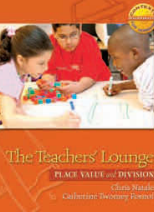
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Grade 3

Common Core State Standards for Mathematics Number and Operations in Base Ten	Contexts for Learning Mathematics
<p>Use place value understanding and properties of operations to perform multi-digit arithmetic.</p>	 <p><i>Minilessons for Extending Addition and Subtraction: A Yearlong Resource</i></p>
<p>Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	 <p><i>Muffles' Truffles: Multiplication and Division with the Array</i></p>
<p>Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations.</p>	<p>Follow with <i>Minilessons for Extending Multiplication and Division</i> and use throughout the year.</p>  <p><i>Minilessons for Extending Multiplication and Division: A Yearlong Resource</i></p>

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Grade 4

Common Core State Standards for Mathematics Operations and Algebraic Thinking	Contexts for Learning Mathematics	
<p>Use the four operations with whole numbers to solve problems.</p>	 <p><i>The California Frog-Jumping Contest: Algebra</i></p>	
<p>Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>	<p>Gain familiarity with factors and multiples.</p> <p>Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p>	
<p>Number and Operations in Base Ten</p>		
<p>Generalize place value understanding for multi-digit whole numbers.</p>	<p>Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</p>	
<p>Use place value understanding and properties of operations to perform multi-digit arithmetic.</p>	 <p><i>Minilessons for Extending Multiplication and Division: A Yearlong Resource</i></p>	 <p><i>The Teachers' Lounge: Place Value and Division</i></p>
<p>Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p><i>Minilessons for Extending Multiplication and Division: A Yearlong Resource</i></p>	<p><i>The Teachers' Lounge: Place Value and Division</i></p>
<p>Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>		

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Grade 4

Common Core State Standards for Mathematics

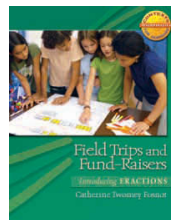
Number and Operations — Fractions

Contexts for Learning Mathematics

Extend understanding of fraction equivalence and ordering.

Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.



*Field Trips and Fund-Raisers:
Introducing Fractions*

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples:* $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.
- Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

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Crosswalk Between Common Core State Standards for Mathematics and *Contexts for Learning Mathematics*, Grades K–6

Grade 4

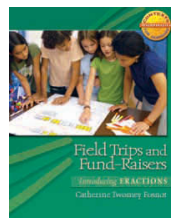
Common Core State Standards for Mathematics

Number and Operations — Fractions, con't.

Contexts for Learning Mathematics

Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

- Understand a fraction a/b as a multiple of $1/b$. *For example*, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.
- Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. *For example*, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)
- Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. *For example*, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?



*Field Trips and Fund-Raisers:
Introducing Fractions*

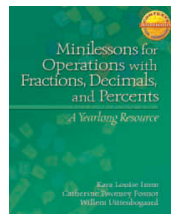
Follow with coin fractions in *Minilessons for Operations with Fractions, Decimals, and Percents*, pgs. 13–22.

Understand decimal notation for fractions, and compare decimal fractions.

Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.

Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.



*Minilessons for Operations
with Fractions, Decimals,
and Percents:
A Yearlong Resource*

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Grade 5

Common Core State Standards for Mathematics

Number and Operations in Base Ten

Understand the place value system.

Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.

Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

Read, write, and compare decimals to thousandths.

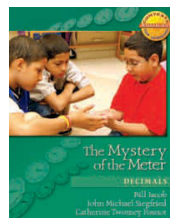
- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
- Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Use place value understanding to round decimals to any place.

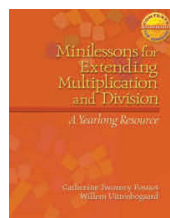
Perform operations with multi-digit whole numbers and with decimals to hundredths.

Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Contexts for Learning Mathematics



The Mystery of the Meter: Decimals



Minilessons for Extending Multiplication and Division: A Yearlong Resource

Continue with this as needed throughout the year and with small groups to get multiplication and division fluent, including the standard algorithms.

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Grade 5

Common Core State Standards for Mathematics

Number and Operations — Fractions

Use equivalent fractions as a strategy to add and subtract fractions.

Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example*, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example*, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

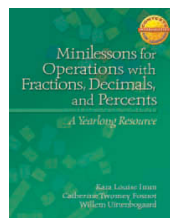
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers.

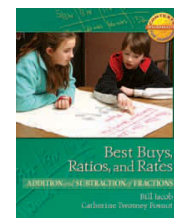
Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

- Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. *For example*, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)
- Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

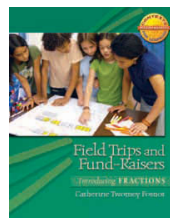
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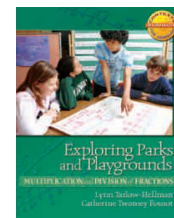
Minilessons for Operations with Fractions, Decimals, and Percents: A Yearlong Resource



Best Buys, Ratios, and Rates: Addition and Subtraction of Fractions



Field Trips and Fund-Raisers: Introducing Fractions



Exploring Parks and Playgrounds: Multiplication and Division of Fractions

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Grade 5

Common Core State Standards for Mathematics

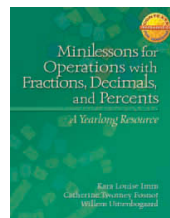
Number and Operations — Fractions, con't.

Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

- Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example*, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.
- Interpret division of a whole number by a unit fraction, and compute such quotients. *For example*, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.

Contexts for Learning Mathematics



Minilessons for Operations with Fractions, Decimals, and Percents: A Yearlong Resource

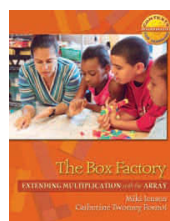
(from pg. 57 to end of book)

Measurement and Data

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Recognize volume as an attribute of solid figures and understand concepts of volume measurement.

- A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.
- A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.



The Box Factory: Extending Multiplication with the Array

Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.

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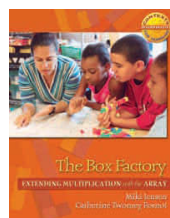
Grade 5

Common Core State Standards for Mathematics

Measurement and Data, con't.

Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

- Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.
- Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.
- Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.



The Box Factory: Extending Multiplication with the Array

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“ Our work is driven by the desire to transform classrooms into communities of mathematicians: places where children explore interesting problems and, like mathematicians, engage in crafting solutions, justifications, and proofs of their own making.”

—Catherine Fosnot



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12/29/2020

Becoming Who I Am – Opal School Online



[Becoming Who I Am](#) from [Museum Center for Learning](#) on [Vimeo](#).

People oftentimes ask, *What becomes of children after they graduate Opal School?* I imagine it's a question that comes up in all of your schools – learning environments that prioritize community and connection, the social-emotional and the intellectual, creativity and expression, empathy and agency, conflict and beauty, democracy and citizenship. The rich neural architecture constructed in these environments isn't always immediately apparent – and certainly isn't captured in standardized exams. That our schools are vital places of joyful theory building in the present is indisputable, but people wonder: What lives bloom from these roots? How do people who grew in these spaces, to paraphrase Loris Malaguzzi, continue to draw from the gem that they hold in their pockets?

Our new film, *Becoming Who I Am*, illustrates how those learning environments that you are working so hard to create lead people to become the neighbors, coworkers, and changemakers the world needs. We hope that it inspires you and that it is useful to you: we hope that you show it at your back-to-school nights to extend parents' imagination and alleviate their fears; in your teacher education classes to help the next generation of educators see the value of their innovation; to your friends and families so that they can finally understand why you do the work that you do; to advocate for greater opportunities for all young people.

We're awfully excited about this film, made by the extraordinarily talented and generous Opal School parents Irene Tejaratchi Hess and Mark Palansky. Let us know what you think!

<https://opalschool.org/becoming-who-i-am/>



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This year, find inspiration in these online courses and in-person retreats:

Online Courses

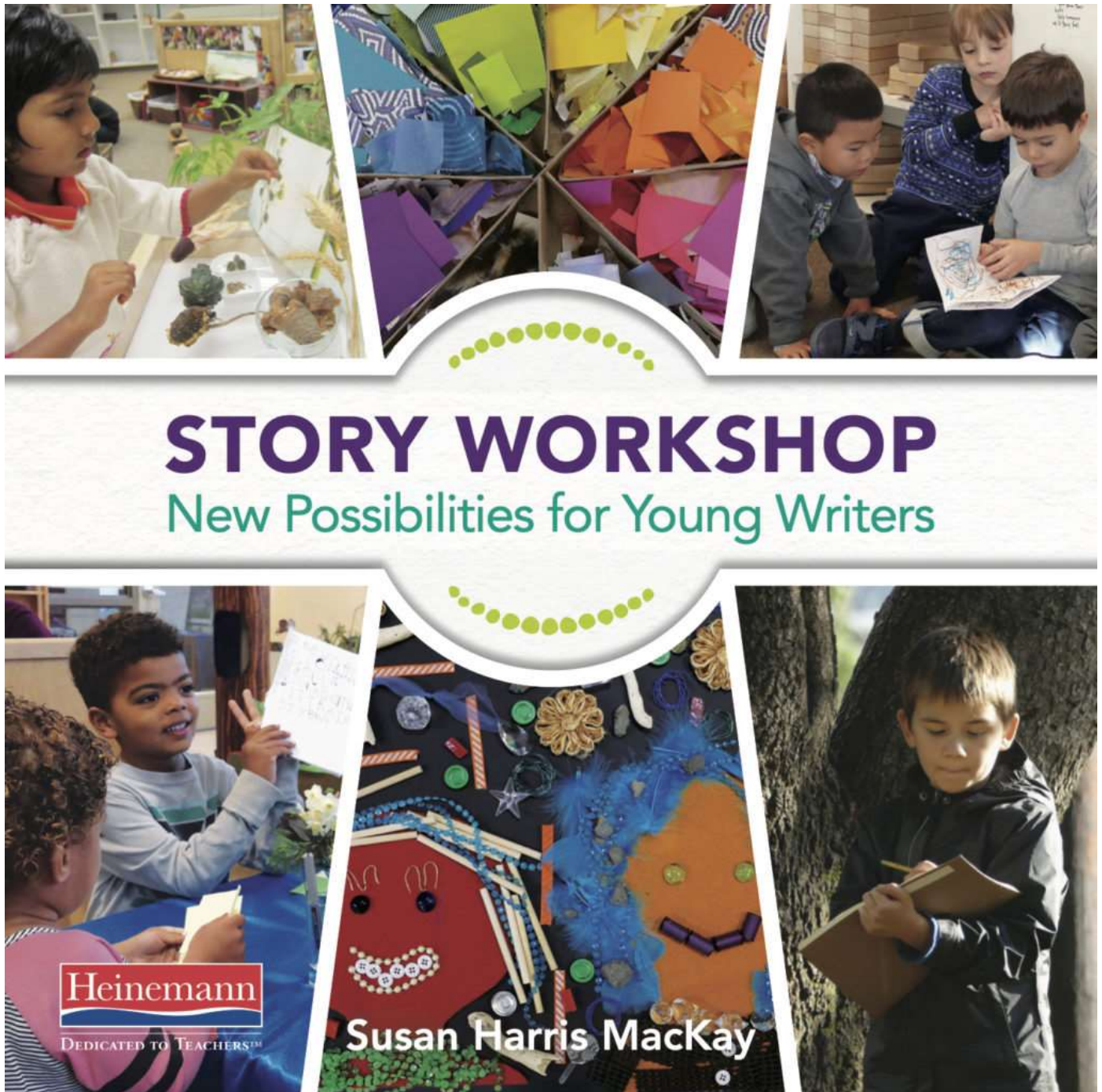
- **Developing Your Story Workshop:** Choose between Fall 2019 and Spring 2020
- **Growing Changemakers:** Fall/Winter 2019
- **Playful Literacy:** Winter/Spring 2020

In-person Retreats

- **Constructing Collaborative and Creative Learning Communities:** October 24–26, 2019
- **Opal School Visitation Days 2020 - Engaging Playful Inquiry:**
Choose between February 5–7, March 15–17, April 15–17, and May 20–22
- **Opal School Summer Symposium:** June 17–19, 2020

Learn more and register at <http://bit.ly/opalschoolworkshops>

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Available for pre-order, January 2021

It is with great excitement that we share the cover of our forthcoming book — *Story Workshop: New Possibilities for Young Writers*— available for pre-order from Heinemann next month!

This book is the result of big questions, years of research, layers and layers of collaboration with colleagues, with children, and with families, and the imagination and support of Heinemann.

Over the years, it has been an honor to watch interest in Story Workshop grow from seeds cast around the world. Taking root in varied soils, Story Workshop has invited members of classroom communities to build creative and meaningful thought partnership grounded in the stories children bring to school – real and imagined. Story Workshop has encouraged writing from those stories – supporting children to develop an authentic relationship between their experiences and the way they choose to craft the telling of them. Those tellings, in a variety of forms, nurture listening. And through that reciprocity, those involved know better who they are, both as individuals and as a community. They learn how much they need each other, and how story helps us find one another. They learn that writing is a powerful tool for connection — and a powerful tool for making the world you want to live in.

Too often, when we ask children, *Does that make sense?*, we mean it as corrective. We already know the answer. Story Workshop invites children to show and to tell us what makes sense to *them*. Story Workshop supports teachers to put literacy learning in service of meaning-making rather than the other way around. It rests on the assumption that we are all making meaning, all of the time — that we can count on that no matter what — and that literacy is a powerful tool to take us where we want to go — alongside others who want those same things: to make meaning in the company of others. Story Workshop gives us a structure to arrive together at new meanings – at a place that might surprise us. Story Workshop creates an opportunity for children to learn that they matter to that journey because it could not happen without them.

We are thrilled to have the support of Heinemann to expand the reach of these powerful findings. The book will also include new video and other online resources to support your Story Workshop. We're looking forward to providing a range of opportunities to engage with you around the content of the book!

BY SUSAN HARRIS MACKAY ([HTTPS://OPALSCHOOL.ORG/TEACHERS/SUSAN-HARRIS-MACKAY/](https://opalschool.org/teachers/susan-harris-mackay/)) | DECEMBER 8, 2020 | TEACHING AND LEARNING ([HTTPS://OPALSCHOOL.ORG/CATEGORY/TEACHING-AND-LEARNING/](https://opalschool.org/category/teaching-and-learning/)) | 1 COMMENT | TAGS: STORY WORKSHOP ([HTTPS://OPALSCHOOL.ORG/TAG/STORY-WORKSHOP/](https://opalschool.org/tag/story-workshop/))



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