

2013-2014

Curriculum Report third/fourth grade

Group Teacher: Hilary Levine

Assistant Teacher: Diana Saraga

2013-2014 was certainly a very special year! The students welcomed me to the Miquon community with so much enthusiasm. Becoming a welcoming and cooperative community were some of the big ideas and goals that our group worked on this year. This translated into many of our academic topics as well.

The Group

Our third/fourth grade group of 18 consisted of 11 boys and 7 girls. The fourth grade group had 7 students, while the third grade group was slightly larger, with 11 students. Almost all of our learning in the classroom and in specials was mixed between third and fourth graders. Our “math challenge” problems allowed third and fourth grade buddies to work together in math at least two times a week.

The group really enjoyed spending time with their first and second grade buddies as well. Many of our students became wonderful role models to their buddies. The third and fourth graders took pride in sharing their projects and writing during buddy time. We also enjoyed mixing groups in morning choice with Sarah and Sara’s third/fourth. We also had the opportunity to practice math tricks with them on the “Mathmagic” show. During mini-courses our third and fourth graders were able to join a mixed-age group in a content area of their choosing, which helped many to form special relationships with both older and younger Miquon students.

From the beginning of the school year all the way until June, we have encouraged getting to know each other through fun group games, as well as small group projects. Much of our learning opened up discussions in the classroom where students had the opportunity to share experiences that helped us learn more about one another, which helped us form a strong classroom community. With the help of our “sticky situation” box, students were able to think of helpful ways to solve tricky social scenarios as a group. We were always impressed with the suggestions made by the class to help keep our classroom peaceful.

The students in this group are extremely fun, inquisitive, and excited about being at Miquon! It made for a fabulous year!

The Curriculum

Diana and I focused our curriculum on developing skills, building content knowledge, and understanding perspective and point of view. These themes were incorporated within each subject taught in the classroom, and in social-emotional settings.

Math

Our math scope and sequence was based around the Investigations curriculum by TERC for instruction. However, we consistently supplemented with additional resources and

materials from Real Math, Singapore Math, and Marilyn Burns' books. Typically, math sessions met in half groups that were then broken up into quarter groups by grade level. Usually, math time began with a warm-up to review previous concepts, whether it was a group game like "I have, who has..." or a brain-teaser math puzzle that children could work on with a partner. A part of our math time was also spent in deep mathematical discussions, allowing children to explain different methods of thinking and solving problems. This provided many opportunities for students to teach and learn from one another and encourage flexible thinking. Students were challenged to use these modes of thinking while completing multi-step story problems in their math workbooks, or when playing games like "multiple turnover" or "close to 1,000" to reinforce each math concept we introduced.

Investigations, like Real Math and Singapore Math, is based around the National Council of Teachers of Mathematics (NCTM) standards.

3rd Grade	4th Grade
<i>Number and Operations</i>	<i>Number and Operations, Algebra</i>
<ul style="list-style-type: none"> - Develop an understanding of the base-ten numeration system and place value concepts to at least 1,000 - Develop an understanding of ideas of counting in units and multiples of hundreds, tens, and ones - Develop an understanding of number relationships, including comparing and ordering numbers - Develop an understanding of multidigit numbers in terms of place value 	<ul style="list-style-type: none"> - Developing a quick recall of multiplication and division facts and related division facts and fluency with whole number multiplication - Apply an understanding of models for multiplication, such as equal sized groups, arrays, area models, and equal intervals on the number line - Apply an understanding of place value and properties of operations, such as the distributive property to develop efficient, accurate and generalizable methods to multiply multi-digit whole numbers - Develop an understanding of how and why procedures such as the standard algorithm procedure works
<i>Number and Operations, Algebra</i>	<i>Data Analysis</i>
<ul style="list-style-type: none"> - Develop a quick recall of addition facts and related subtraction facts and fluency with multi-digit addition and subtractions - Solve arithmetic problems using models such as combining/separating sets or using number lines - Understand the properties of addition using 	<ul style="list-style-type: none"> - Solving problems by making frequency tables, bar graphs, picture graphs, and line plots - Develop an understanding of terminology such as mean, median, range, mode, concentrated data, and outliers

<p>commutative and associative properties</p> <ul style="list-style-type: none"> - Develop an understanding of how and why procedures such as the standard algorithm work - Understand the meanings of multiplication and division of whole numbers through the use of representations such as equal-sized groups, arrays, area models, and jumps on the number line - Use properties of addition and multiplication to multiply whole numbers - Relate multiplication and division as inverse operations 	
<p><i>Data Analysis</i></p> <ul style="list-style-type: none"> - Use addition and subtraction of whole numbers to construct and analyze frequency tables, bar graphs, picture graphs, and line plots and use them to solve problems 	<p><i>Numbers and Operations, Fractions</i></p> <ul style="list-style-type: none"> - Develop an understanding of the meanings and uses of fractions to represent parts of a whole, parts of a set, and points or distances on a number line - Understand that the size of a fractional part is relative to the size of the whole/ - Use fractions to represent numbers that are equal to, less than, or greater than 1 - Solve problems that involve comparing and ordering fractions by using models, benchmark fractions, or common numerators or denominators - Use models, including the number line, to identify equivalent fractions

Reading

In our classroom, we focused the first half of the year on advanced reading strategies such as making text connections, making inferences, understanding plot, summarizing, questioning, and finding the main idea. All of these strategies can be applied to both fiction and nonfiction reading. We always began with a mentor text, typically in the form of a picture book. Students had the opportunity to work with the mentor text to practice these skills independently and in small groups during our reading block. Children continued to practice these strategies by using their own independent and nightly reading novels to write detailed reading responses that asked them to show their understanding of these

reading concepts, as well as during classroom group discussions relating to our many read aloud books.

This year, third and fourth graders were introduced to a very special person, Tomie Depaola, during our author study. Through his many books, students continued to apply various text connections--for example, comparing *Strega Nona* with the story of *The Magic Porridge Pot*. The characters in all of Mr. Depaola's books are very multi-faceted, so students also practiced describing character traits and using evidence from the text to support their description. In our study of Tomie, children also had the opportunity to flex their drama muscles in our reader's theater of the *Strega Nona* story! The study ended with a project where partners selected a Tomie book we had not yet read as a class to create a puppet show for the rest of the group.

In the Spring, students had the opportunity to engage in literature circles while working in small groups of three to four students. Each day, children had a particular role in the group in order to contribute to the book discussion. Some of the roles, which are familiar concepts to students based on our earlier mini lessons and reading responses included:

- Summarizer (retelling/paraphrasing)
- Word Wizard (vocabulary)
- Questioner (discussion director)
- Illuminator (identifying/infering quotes and important passages)

In these groups, students were again encouraged to practice working together effectively. Teachers circulated between groups to monitor the discussions and provide additional prompting for the children to think more deeply about the story.

Writing

This year, our group really grew as writers! The use of planning sheets helped children feel confident and organized with the writing they produced in our classroom. We began the year with creative writing pieces connecting to a nature exploration. Children had the freedom to decide what type of creative writing they would like to produce, whether that be a made-up story, poem, or a biographical, personal experience. Students had the opportunity to go through the writing cycle, which is a series of steps that leads the author to a wonderful, well-executed published piece of writing!

The writing cycle:

1. Brainstorm Ideas
2. Choose an Idea
3. Draft
4. Revise
5. Peer Conference
6. Teacher Conference
7. Edit
8. Publish

Students were introduced to the difference between revising and editing this year. Third and fourth graders understand that revising means adding or removing parts of the story, and/or moving sentences around so it makes sense and flows within the story. Editing happens after revising, when students check for correct capitalization, punctuation, and spelling. Children also practiced being good peer editing partners and providing their classmates with thoughtful feedback and suggestions.

Third and fourth graders worked on expository writing in their peer interviews based on a topic of each half-group's choice. Whether it was Halloween or bullying, each child researched the topic and came up with deep, interesting questions to ask their interviewee. Students thought about how to "hook" their reader with exciting opening sentences. Many students began their interview write-up with a quote, a question, a fact, or a statistic that related to their topic to engage their reader.

Another genre of writing that we studied this year was persuasive writing. In this study, children published their own letters ranging in wide topics of personal interest to the individual student. Topics ranged from convincing parents to host a slumber party to encouraging poachers to stop killing sharks. Like almost all of our writing projects this year, students continued to use graphic organizers and planning sheets to create a well thought out piece!

We finished the year with a study of mystery writing. Students used their prior knowledge from our mystery literature circles and various read aloud mysteries. Using planning sheets, the children organized a short story that included many of the features found in mystery writing, such as a crime, suspects, distractions, clues, motives and solutions.

Word Study/Handwriting

The Rebecca Sitton spelling program provided the framework for word study and spelling this year. The cloze story dictation assessments allowed children to practice both priority words (words that students should know how to spell 100% of the time) and core words (high-frequency words). Priority and core words are continually re-introduced in assessments throughout the year. The Sitton program allows students to experiment with words, letter and sound patterns through sorting activities, workbook pages, and interactive games. This year, third and fourth graders used the Handwriting Without Tears program to practice cursive writing, and the Dance-mat Typing program to practice keyboarding skills.

Social Studies

This year our group focused on studying civilizations of the past. By studying the civilizations of the Lenape and the Aztecs, students began to understand how these groups affected our lives today. Along with the social study of these groups, students also learned about the geography and topography of the regions where these civilizations survived.

We looked at how the Lenape Native Americans lived in our region. By exploring the environment around Miquon and visiting Churchville Nature Center, students began immersing themselves in the world that the Lenape inhabited. The children were encouraged to think about how they would survive during this time by participating in hands-on activities, such as building their own Lenape structures made from natural materials found on campus. Students also thought about perspective in the creation of their Lenape

persona. Children selected a persona that lived during Lenape times based on our in-depth study of the Lenape people and their roles in the tribe. Creativity took center stage when these personas were incorporated into an original Lenape legend that highlighted the storytelling traditions of the Native American people. The class began to see connections between known Lenape legends, such as the continuing presence of a creator, and an ending that explains why something is the way it is today. In studying these legends, students began to make connections to other folktales and legends they have heard from other cultures and in books as well. Our class also made connections to the foods we eat today in their group research projects on the three sisters (corn, beans and squash) that the Lenape people relied on for sustenance, and that are still staples in our diets today! Groups worked together to ask questions about these foods to research, such as:

- * Who did the planting of the three sisters?
- * What did the Lenape cook with the three sisters?
- * Where did the Lenape plant the three sisters?
- * When/at what time of year were the three sisters planted?
- * Why did they plant the three sisters?
- * How/what tools were used to plant the three sisters?

Through both the group structure building project and the three sisters research project, students practiced working successfully in groups. Children were able to develop problem-solving skills, such as making sure everyone in the group is involved, as well as listening to and respecting others' ideas. Students practiced responding to ideas constructively and fairly.

In our study of the Aztecs, students learned both about the geography of Mexico and the rich culture of the Aztec tribe. We began by learning about landforms that are found in Mexico, and students worked in groups to create and decorate salt-dough maps of Mexico. Children had to include certain features on their maps, including a key and topographic features like mountain ranges and valleys. Through non-fiction, informational readings, third and fourth graders learned about the Aztec culture and their traditional way of life. Students continued to practice reading for information and responding to questions in complete sentences.

Similar to the Lenape study, our class learned about the staple foods of the Aztecs. One of those foods happens to be chocolate, which was used in trading, medicine and as a part of the Aztec's daily diet. We were fortunate to schedule a visit to John and Kira's chocolate shop to learn about how chocolate is made and the history of chocolate in Mexico and around the world! We also connected the Aztec study to the Lenape in comparing family structures, government and rule, as well as children's roles and games in the Aztec society.

Our major project in the Aztec study centered around the city of Tenochtitlan. Through research from classroom books and online resources, and our trip to the Penn Museum of Anthropology and Archaeology, children worked in groups to create sections of the capital city. Each group was responsible for creating a quadrant of the city, including the Sacred Temple, the Pyramids, the Royal Palace, and the center marketplace, as well as the canals and waterways that separated each section of the city. Students used information that they collected about their section to write a summary (framed within who, what, where, when, why and how questions) of the importance of their structure to the Aztec culture.

We finished the year with independent teaching projects. Children were encouraged to choose a topic that they feel they are “experts” on. Third and fourth graders had to create a lesson plan and provide an activity and worksheet that would teach the rest of the class about this particular topic of interest. It was a fantastic way to learn even more about each other and our passions before the year ended!

In Summary

Diana and I are so thrilled to have had the pleasure of working with such a wonderful group of third and fourth graders! Thank you to all of the students who came to school each day overflowing with enthusiasm and excitement for all of our learning! It was a joy to get to know each student and their passions! We would also like to acknowledge all of the amazing, supportive parents. Whether you helped chaperone a field trip, brought in an interesting resource for one of our units of study, or nurtured your child’s learning by attending a publishing party or assembly, each of you had an important role in this incredible school year! This was, again, such a phenomenal year! Thank you!