
 ***Professional
Development***

by Marshall Cavendish Education

St. Johns Country Day School
Attn: Martha Hansen – Business Office
3100 Doctors Lake Drive
Orange Park, FL 32073

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Date: March 1, 2016, Edited May 24, 2016

Marshall Cavendish Education

Marshall Cavendish Education believes that becoming a lifelong learner not only applies to students, but to teachers as well. That's why we want to give teachers the support they need and deserve to become their most effective.

Marshall Cavendish Education is dedicated to bringing the Singapore approach to teachers and students here in the United States. Our courses allow busy teachers the opportunity to grow professionally, enhance their knowledge, and improve the quality of classroom instruction. Our professional development courses will have you mastering the genuine Singapore mathematics approach. The programs have been developed by an academic team whose members have years of experience in education, professional development and implementing the Singapore approach.

We pride ourselves on offering in-house and on-location professional development. Our in-house resource center gives you the opportunity to experience our innovative digital curriculum, Math Buddies. The center houses an interactive 80-inch Smart Board, Singapore mathematics textbooks, practice workbooks and other supplemental materials to support your learning and development.

We offer a variety of professional development courses that combine theory with a practical, hands-on approach. We'll work with you to develop and execute the training program that is right for your district or school. Our sessions can be tailored to your needs from pre-planning through a successful program implementation and thoughtful follow-up in the weeks and months following the event.

“
An investment in education always pays the
”
best interest.

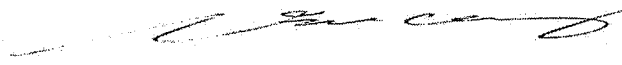
- *Benjamin Franklin*

Pricing Structure

Description	Date(s)	Hours	Price
<p>Singapore Math Professional Development</p> <ul style="list-style-type: none"> • 1 Day Package: • Grade level Groupings: Pre K - 5 <p>Date: Monday August 8, 2016</p> <p>Course: Singapore Math / Content & Pedagogy Grade Level Content / Problem Solving Connection to Math In Focus®</p>	<p>August 8, 2016</p>	<p>1 Day 6 hrs.</p>	<p>\$ 2900</p>
<p>Course Descriptions:</p> <p>Grade Level Content and Pedagogy: Participants will re-think the role of school mathematics to develop thinking and problem-solving ability. Learning theories such as those by Bruner, Skemp and Dienes help participants understand how students can access mathematical concepts. Differentiation methodologies to support students needing intervention and enrichment will be explored.</p> <p>The CPA Approach / Mental Math Strategies / Problem Solving: Participants will examine the use of the concrete pictorial abstract approach in Singapore Math to enable students to learn new concepts, develop conceptual thinking and apply to problem-solving. Participants will use hands-on manipulatives and explore activities.</p>			
<p>*Accommodation and Travel Expenses for 1 Lecturer / Trip for In-School PD</p>			<p>Approx \$875 / trip</p>
<p>Total</p>			<p>\$3775</p>

Additional Notes:

- Set-up of presentation room will be confirmed with presenter 1 week prior to the dates.
- **This proposal is valid until July 22, 2016.**
- **Please initial the payment terms and cancellation policy included on the final page.**

Proposed by:  _____ Vivian Cheng Sales & Business Development Director Marshall Corporation 99 White Plains Road Tarrytown, NY 10591 Date: May 24, 2016	Accepted by: _____ Signature Printed Name: _____ School Name: School Address: Date:
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Payment Terms and Cancellation Policy

All payments are to be made to "Marshall Cavendish Corporation". (MCC)
To secure a training date, MCC requires a signed copy of the contract. The course fees are to be payable to MCC WITHIN 30 *business days of the course commencing.

Cancellations or date rescheduling may occur, without penalty, at least 15 business days before commencement.

- Notification less than 15 business days will result in 50% of collected monies being retained.
- Notification less than 3 business days will result in no refund of any collected monies.

Inclement weather cancellations will not result in a penalty. A mutually agreed upon rescheduling date will be determined.

MCC reserves the right to cancel the provision of services by giving the School notice in writing at least 7 business days before the commencement of the course. MCC will endeavor to offer an alternative date for the professional development program to be conducted. In the event MCC is unable (at it's sole discretion) to offer alternative dates for the course, MCC's liability shall be strictly limited to the refund of any monies paid by the School to MCC under this Agreement within reasonable time and MCC shall bear no other liability to the School whatsoever.

*business days are defined as Monday-Friday (weekends excluded)

Initial Required

MARSHALL CAVENDISH EDUCATION
Professional Development Plan

Fall 1. (First visit)

Implementing Singapore Math

Singapore Background & Research

Approach: CPA and Problem Solving strategies

Concept-based:

1. Fundamentals of Singapore Mathematics Curriculum (3hrs). Appropriate for K-8 new to SG Math
2. Problem Solving in K-5 Mathematics (3hrs)

Note: The content used for this day will be grade-level appropriate.

Fall 2. (Second visit)

Content and Pedagogy

Common Core units. Problem Solving through Bar Models

Developing the CCSS Practice Standards (If Applicable)

Units available:

Concept based: (choose one)

1. Developing Mathematical Practice through Whole Numbers in K-5 (3hrs)
2. The Bar Model Method in K-5 Mathematics (3hrs)
3. Development of Early Numeracy in Kindergarten Mathematics (3hrs)

Note: The content used for this day will be grade-level appropriate.

Content- based: (choose one)

1. Teaching of Whole Numbers (3hrs). Appropriate for K-5.
 2. Teaching of Fractions(3hrs) Appropriate for 3-8.
 3. Teaching of Percents (3hrs) Appropriate for 5-8.
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Winter. (Third visit)

OR

Content and Pedagogy

Common Core units. (If Applicable)

Problem Solving through Bar Models
Developing the CCSS Practice Standards.

Units available:

Concept based: (choose one)

1. Developing Mathematical Practice through Whole Numbers in K-5 (3hrs)
2. The Bar Model Method in K-5 Mathematics (3hrs)
3. Problem Solving in K-5 Mathematics (3hrs)

Note: The content used for this day will be grade-level appropriate.

Content- based: (choose one)

1. Teaching of Fractions (3hrs).
Appropriate for K-5.
2. Teaching of Decimals (3hrs)
Appropriate for 3-8.
3. Teaching of Percents (3hrs)
Appropriate for 5-8.
4. Teaching of Ratios (3hrs)
Appropriate for 5-8.
5. Teaching of Geometry (3hrs)
Appropriate for K-5

Coaching

Class observations

MCE PD Specialist will observe up to two teachers in a 6hr day. Each observation will last 3 hours. Consist of pre-meeting, observation of lesson and debrief with an individual or group of teachers.

Demonstration lessons

MCE PD Specialist will model up to two lessons in a 6hr day. Each demonstration will last 3 hours. Consist of pre-meeting, observation of lesson and debrief with an individual or group of teachers.

Possible modification: One Demo and one class observation in one 6hr day.

Spring (Fourth Visit)

OR

Assessment

Designing written assessments

Units available:

Concept based: (choose two)

1. Formative Assessment for K-5 Mathematics (3hrs)
2. Designing a Written Assessment for Mathematics (Selected Response) in 2-5th (3hrs)
3. Designing a Written Assessment for Mathematics (Constructed Response) in 2-5th (3hrs)

Differentiated Instruction

Learn a model for differentiated instruction.

Units available:

Concept based:

1. Differentiated Instruction in K-5 Mathematics (3hrs)
2. Anchor Tasks in K-5 Mathematics (3hrs)

Professional Development

Unit Descriptions

Concept-Based Units

Fundamentals of Singapore Mathematics Curriculum

This course aims to help participants re-think the role of school mathematics to develop thinking and problem-solving ability. Learning theories such as those by J. Bruner, R. Skemp and Z. Dienes help participants understand how students can access mathematical concepts.

Problem Solving in K-5 Mathematics

This course helps participants distinguish and identify mathematical tasks which are considered mathematical problems. This course helps participants understand the roles of word problems and related instructional strategies including the Newman procedure to diagnose difficulties in word problems. Participants learn to use different problem solving heuristics and Polya's stages in problem solving.

Bar Model Method in K-5 Mathematics

Participants learn to use the bar model method to solve word problems (arithmetic and algebraic problems) that include part-whole, comparison and change situations. Advanced techniques in the method are also included.

Differentiated Instruction in K-5 Mathematics

Participants learn models for differentiated instruction. The course helps participants to plan for differentiation for advanced as well as struggling students.

Development of Early Numeracy in Kindergarten Mathematics

In this course, participants examine the scope and sequence of a numeracy curriculum. Strategies to help children develop early numeracy will be the focus of this course. Participants will also learn to assess children by observing and listening. In particular, case studies include content topics such as numbers to ten, number bonds, addition and subtraction, as well as shapes. Learning centers and the use of children literature will be briefly discussed.

Formative Assessment for K-5 Mathematics

In this unit participants learn about test item writing, with a focus on selected-response items. Participants will analyze items in terms of test objectives and cognitive level. Participants will also learn to construct a grading scheme.

Designing Written Assessment for Mathematics (Selected Response) in 2-5

In this unit participants learn about test item writing, with a focus on selected-response items. Participants will analyze items in terms of test objectives and cognitive level. Participants will also learn to construct a grading scheme.

Designing Written Assessment for Mathematics (Constructed Response) in 2-5

In this unit participants learn about test item writing, with a focus on constructed-response items. Participants will analyze items in terms of test objectives and cognitive level. Participants will also learn to construct a grading scheme.

Developing Mathematical Practices Through Whole Numbers in K-5

This unit is designed as an introduction or an extension to other problem solving units to help teachers understand the principles behind teaching in a problem-solving approach that incorporates mathematical practices.

Anchor Tasks in K-5 Mathematics

Singapore textbooks are designed for a three-part lesson format. Each lesson comprises of an anchor task which is used to help students achieve the learning goal of a lesson. Discover how to identify anchor tasks or to design one and see how it unfolds in a classroom to provide all students with opportunities to improve their math skills.

Content-Based Units

Teaching of Whole Numbers

Participants learn the different uses of whole numbers including ordinal and cardinal numbers. The concepts of number bonds, place value and regrouping are given emphasis. Participants learn to teach the four basic operations including mental strategies and combined operations. Formal ideas such as factors and multiples are also discussed.

Teaching of Fractions

Participants learn fundamental ideas about fractions such as equal parts, fraction notation and equivalent fractions. The notions of fractions as part of a whole and part of a set as well as a number are included. Participants learn to teach the four basic operations including mental strategies and combined operations.

Teaching of Decimals

Participants learn teaching strategies to convert between fractions and decimals. The concept of place value, regrouping and the four basic operations are revisited in the context of decimals.

Teaching of Percent

Participants learn teaching strategies for percent and the relationship between percent and fraction. The concept of percentage of a quantity, and percentage change are also dealt with.

Teaching of Ratio

Participants learn the relationship between ratio and fraction. The concept of equivalent ratio is included. Ratio of up to three quantities is considered.

Teaching of Geometry

Participants learn about common shapes and polygons as well as selected properties of triangles and quadrilaterals. Concepts of points, lines and angles are included. Ideas such as angles on a line, angles at a point, opposite angles are discussed. Participants learn about symmetry, motion geometry and tessellation. Participants also learn about van Hiele's theory of geometric thought.