

EXAMPLE COURSE ONE INSTRUCTOR

SDC Course Proposal Form

A course is defined as a series of sessions where the individuals taking the course develop a deeper understanding of an academic discipline or a broader repertoire of instructional practices.

INSTRUCTOR INFORMATION

Name: Martha Washington

Co-Instructor: none

Email: mwashington@aps1.net

School: Wood Hill Middle School

REIMBURSEMENT (Credits or Stipend)

(If this is a repeat of the same course credits can not be given as payment - only a stipend is available.)

Credits: 6 (2 for preparation and 4 for contact time)

Stipend: \$1,770 (based on Appendix C of AEA Contract)

(NOTE: Credits/Stipend will be pro-rated when less than twelve (12) participants complete all course requirements.)

CO-TAUGHT MODEL (two instructors) with a minimum of 18 participants

Credits: 5 each *or*

Stipend: \$1,327.00 each (75% of \$1770.00 above)

COURSE INFORMATION

Title: Using Reading Strategies to Build Math Comprehension

Has this course been offered before? No If so, when _____.

Are there any changes to the course? If yes, please explain: _____

Prerequisite for Course: None

Targeted Audience: Elementary and Middle School Teachers - K - 8

Enrollment: Minimum: 12
Maximum: 25 (determined by instructor)

Course Hours: 10, 20, or 30 Hours (30 being the maximum)

Dates: Day of the Week: Mon Tues Wed Thurs Fri

Hours of the Day: 3:30 - 5:30

Start Date: January 13 End Date: April 14

Total Number of Sessions: 10

Location: Building: Wood Hill Middle School Room Number: A115

Budget: \$_____ Specify what budget will be used for: _____

MYLEARNING PLAN COURSE DESCRIPTION: Be specific - 6 lines maximum

This course is designed to provide teachers a forum for investigating how to best utilize comprehension strategies used in reading to build math comprehension. Participants in this course will be expected to learn, apply, test, and refine their instructional approach to math comprehension. They will participate in text based discussions, collaborative lesson/unit development, peer observation, and reflect on the connections between strategies that teach reading and math comprehension.

Please explain how this course addresses all applicable sections below:

Strategic Plan

Area of Focus: High Academic Achievement for All

Goal Number: 1

Strategy: 1.3 - Ensure that students have diverse learning experiences that evidence differentiated instruction, an understanding of learning styles, and real world experiences through PK-12 classroom instruction.

School Improvement Plan

Area of Focus:

Goal Number:

Strategy:

Individual Learning Goals

Area of Focus:

Goal Number:

Strategy:

Other, please explain:

SDC Course Syllabus Form

I. Course Description

1) How will this course impact the professional development of the participants?

Utilizing the text, Comprehending Math, Adapting Reading Strategies to Teach Mathematics K-6 by Arthur Hyde, teachers will be able to expand their repertoire of strategies to teach mathematics using reading strategies.

2) How will the participants use what they learn in the classrooms?

Participants will have an opportunity to create lesson plans utilizing the strategies examined within the course.

3) How will participation in the course improve student achievement?

By using reading strategies within the mathematics curriculum, students should be able to approach mathematics with a new perspective.

4) How will the impact on student achievement be measured?

The use of pre-tests and post-tests will be used to measure student achievement.

II. Course Learning Objectives: (What will participants know and be able to do when they finish this course? Participants will know how to.....)

At the completion of this course, teachers will know and be able to:

- 1. Explore the relationship between reading comprehension strategies and mathematics.*
- 2. Integrate strategies into lesson and unit development*
- 3. Evaluate instructional practice utilizing strategies*
- 4. Analyze the effects of instruction on student achievement*

III. Session by session plan of what will be covered and expectations of each

See attached

IV. Description of Final Product (A DESE Requirement) The final product must be - tied to the syllabus, evaluated by a rubric designed by the instructor and submitted to the SDC for final credit approval.

Participants will complete four assessments as well as complete two lesson plans.

V. **Bibliography:** (no more than 2 pages with highlighted readings - if applicable)

Comprehending Math, Adapting Reading Strategies to Teach Mathematics K-6 by Arthur Hyde

"A Model for Understanding, Using and Connecting Representations", TCM 9/04

"The Day Math and Reading Got Hitched", TCM 11/07

VI. **Proposed Participant Evaluation Form:**

See attached.

Date	Topical Outline	Assignment	Assessments
Before 1 st meeting		<ul style="list-style-type: none"> • Purchase Book • Read Introduction 	
1/13	<ul style="list-style-type: none"> • Establish ground work for course • Essential Questions, Assessments outline • Introduction discussion "The Making Meaning Protocol" 	<ul style="list-style-type: none"> • Read Chapter One: Asking Questions • Reading Response - <ul style="list-style-type: none"> ○ How might you use the strategy of "asking questions" and apply it to introducing a new topic in math? 	
1/20	<ul style="list-style-type: none"> • Small group sharing of reading response • Large group round robin of shared response and feedback • Further investigation - What questions are raised as a result of the reading response and discussion? • Small Group - What is necessary to answer the questions? Can we answer the questions now? 	<ul style="list-style-type: none"> • Read Chapter Two: Making Connections • Reading Response - <ul style="list-style-type: none"> ○ How might you integrate making connections M - M, M - S, and M - W into your instructional practice? 	
1/27	<ul style="list-style-type: none"> • Provide group with three areas on which to document the ideas pertaining to making connections. Students will have the opportunity to do a walk-about. • Large group discussion about what is on the chart paper. • Small group discussion - What new ideas have been resonated, what doubts have been raised, what points are strong and what points need further investigation? • Round robin 	<ul style="list-style-type: none"> • Read Chapter Three: Visualization • Reading Response - <ul style="list-style-type: none"> ○ What is the relationship between visualization and math representation? ○ Consider a math lesson recently presented - ○ What representation did I use when I posed the task? ○ What representation did students use to understand the task? 	Complete Assessment #1 anytime during this time frame.
2/3	<ul style="list-style-type: none"> • Read the article "A Model for Understanding, using and Connecting Representations", TCM 9/04 • As you read the article, keep track of: What is worth holding on to? What warrants further investigation? How do you and your students utilize representation? How do you and your students utilize representation? Share math representations to topic 	<ul style="list-style-type: none"> • Read Chapter Four: Inferring and Predicting • Reading Response - <ul style="list-style-type: none"> ○ Describe a mathematical inference. ○ Relate a classroom situation where you noticed students using a mathematical inference. • Bring math teacher's manual 	
2/10	<ul style="list-style-type: none"> • Small group think, pair Using your experience, reading response and EDM teacher's manual for referencing, respond to questions on p. 124. • Large group share • What does inferring and predicting look like in the math classroom? 	<ul style="list-style-type: none"> • Read Chapter Five: Determining Importance • Reading Response - <ul style="list-style-type: none"> ○ What are the connections between math story problems, problem solving, and math modeling? 	Begin Assessment #2 Consultancy Protocols on 3/3
2/24	<ul style="list-style-type: none"> • Read the article "The Day Math and Reading Got Hitched", TCM 11/07 • As you read the article, what connections can you make between the texts? • Participate in a Text Rendering Protocol 	<ul style="list-style-type: none"> • Read Chapter Six: Synthesising • Bring in lesson plan 	
3/3	<p>Consultancy Protocol</p> <p>Small group protocol work where students will present their lessons to the group and ask for feedback.</p> <p>Reflection</p> <p>How did the protocol expand thinking and/or instructional plan?</p>	<ul style="list-style-type: none"> • 2 note cards/copy for each • Second lesson/peer observation plan 	Begin Assessment #3
3/31	Unit and Peer Observation Presentations	<ul style="list-style-type: none"> • How do we measure the effectiveness of this research? <ul style="list-style-type: none"> ○ Brainstorm a variety of 	Begin Assessment #4

		measures <ul style="list-style-type: none"> • Research data collection and assessment strategies 	
4/7	Assessment Development <ul style="list-style-type: none"> • Design an assessment tool that provides pertinent data • Synthesis 	<ul style="list-style-type: none"> • Read assessment 	
4/14	<ul style="list-style-type: none"> • Assessment results 	<ul style="list-style-type: none"> • 	