



Mental Math Chats: Leveraging Meaningful Math Discussions

EDUO 9577 1 Semester Credit/Unit

Instructor – Maureen Surbella

msurbella@dominicancaonline.com.

Public Syllabus

*Note: This is a Public syllabus of the course.
For a fully detailed syllabus, please e-mail the instructor.*

Course Overview: Develop an understanding of what a math chat is. Learn how to have meaningful mathematical discussions with number/symbol relationships and computation fluency using mental math as the staple for learning. Develop a cultural transformation in their classroom using inquiry-based learning and dialogue. *A Google e-mail account and use of Drive is recommended for this course.*

Course Relation to CCS or other Professional Standards

CCSS.MATH.PRACTICE.MP1 Make sense of problems and persevere in solving them.

CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.

How to Submit Coursework

Each completed assignment in this course is submitted to the instructor for review. All assignments are submitted to the instructor by Gmail (contact the course instructor for alternative methods).

- Submit assignments to use for sharing: maureen11970@gmail.com
- Create a Shared Drive folder. Name the folder with your first initial and last name and EDUO 9577 (i.e. DJones EDUO 9577)
- Each assignment is to be shared separately through Gmail and shared with course instructor with instructor given editing rights. Placing your assignment in your shared folder does not generate a notification.
- Each assignment must include your first initial and last name along with the Assignment # (i.e. DJones EDUO 9577 Assignment 4. Include the course number in the subject line in your email.
- Each document needs to have your full name, course number and assignment number at the top of each document.

Course Modules

ASSIGNMENTS	DESCRIPTION
<p>Assignment 1:</p> <p>Getting Started/ Rationale for Learning</p>	<p>Objective: To explore the purpose of a mental math chat.</p> <p>Activities:</p> <p>1.) Reflect: Write- approximately 250-500 words based upon your Self-Assessment and Your Understanding of Boosting Mathematical Reasoning and Fluency.</p>
<p>Assignment 2:</p> <p>Framework of Mental Math Chat</p>	<p>Objective: To develop an understanding of the Math Chat Framework</p> <p>Activities:</p> <p>1.) Read Number Talks Frameworks 2.) Take video notes and key takeaways from the video. https://drive.google.com/open?id=1nKrbYIveQ_ERUwbPgYT6yZPcBZAxYdLHhicMckULyaQ</p>
<p>Assignment 3:</p> <p>Questioning Techniques</p>	<p>Objective: Teachers will develop key questioning techniques to guide the teacher-led, student-centered approach.</p> <p>Activity:</p> <p>Select two articles to compare. Use the template titled “Comparing Two Articles” which the link is provided and is available in Course Assignments.</p> <p>https://docs.google.com/document/d/1fwALY5eDhhJ4eqNHhUnaARGqJ_K0290uNP67OV6L4hk/edit?usp=sharing</p>
<p>Assignment 4:</p> <p>Math Chats across the operations</p>	<p>Objective: To develop strategies across all operations.</p> <p>Activity:</p> <p>Select a specific operation (adding, subtracting, multiplying or dividing) which is appropriate for the grade/level you teach. Create understanding of each strategy and apply NEW example or number problem for each strategy for that operation. Create a table or other document to demonstrate these strategies.</p>
<p>Assignment 5:</p> <p>Lesson Planning</p>	<p>Objective: To create a lesson plan that encourages discourse and computational fluency.</p> <p>Activity:</p> <p>Create one lesson plan that demonstrates and encourages computational fluency. Use template provided to create lesson plan.</p>
<p>Assignment 6:</p> <p>Action Project</p>	<p>Objective: To Build a Set of Math Talks Across a Mathematical Concept</p> <p>Activity: Create Action Project</p>

Assignment 7: Reflection, Resources, and Reminders:	Objective: The purpose of this reflective essay is for you to reflect on your experiences and integrate your learning from all aspects of the course, including the assigned readings, class activities, and projects. Activity: Approximately 500 words, double-spaced reflection on experiences from course.
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Course Assessment Rubric

EXCELLENT	ACCEPTABLE	NOT ACCEPTABLE
Meets or Exceeds Course Objectives: A to A-	Majority of Work Meets Course Objectives: B+ to B-	Needs Considerable Improvement: Resubmit Work Suggested: C or below
Excellent mathematical understanding of the knowledge and skills of course objectives.	Proficient understanding of mathematical knowledge and skills of course objectives.	Minimal no mathematical understanding of knowledge and skills of course objectives.
Assignment responses exhibits outstanding evidence of new knowledge shown by several solutions to the same problem.	Assignment responses exhibits proficient evidence of new knowledge shown by several solutions to the same problem.	Assignment responses exhibits little to no evidence of new knowledge shown by several solutions to the same problem.
Work submitted was organized and clearly articulated.	Most work submitted was organized and clearly articulated.	Work submitted was not organized or not clearly articulated.
Excellent lesson plan which incorporates the strategy and provides students the opportunity for exposure to multiple strategies to solve problems	Lesson plan is complete which incorporates the strategy and provides students the opportunity for exposure to multiple strategies to solve problems	Lesson plan is incomplete which does not incorporate the strategy and struggles for students to have the opportunity for exposure to multiple strategies to solve problems
Work is free of spelling and/or grammatical errors.	Work has few spelling and/or grammatical errors.	Work has numerous spelling and/or grammatical errors.

- You are allowed 9 months to complete the course
- For questions involving your registration, please contact us at support@dominicanCAonline.com or call (800) 626-5080. To change your address, link to your Dominican Student Account at https://www.dominicanaonlinestore.com/store/index.php?main_page=login
- For Dominican Self-Guided course information, link to <http://dominicancaonline.com/Dominican-CA-Online-FAQ>