

Google Math Classroom Project

Description: During the Covid-19 pandemic, Dr. Reister and I conducted a study, where we surveyed FUS education program graduates from the past 10 years regarding their transition to fully remote instruction. One of the questions the graduates were asked is “What skills or knowledge do you currently lack that you believe would more effectively facilitate your shift to online instruction? The number one response was “Knowledge of Google Classroom and the Google Suite.” So guess what! We are going to remedy this, by giving you the opportunity to set up your own google math classroom, where you create one full week of instructional content and assessments in mathematics.

Requirements: For this project, you will create a week’s worth (5 days, M-F) of math content that is focused on specific K – 8 common core state standards of mathematics. When reviewing your week of content in the google classroom, I will be looking for the following:

- ✓ A completed curriculum map detailing the week’s topics, objectives, strategies, and assessments
- ✓ 5 individually created lessons in google classroom (for M-F) with directions given to the students regarding how to proceed through the daily tasks, as well as links to any content/instructional videos/assessments for that day
- ✓ Among the activities/instruction provided in the google classroom, you need to create **2 videos totaling between 15 – 30 minutes altogether of you asynchronously teaching some skill**. There are many options for these videos – you can screencast a powerpoint, a worksheet, or film yourself instructing on a real or virtual whiteboard, just to name a few. These videos need to be uploaded to YouTube and linked in the google classroom. (You are more than welcome to create more than 2 videos ☺)
- ✓ One zoom session link and **one recorded zoom session** (minimum of 7 minutes) where you **teach or review a concept from one your daily lessons to a classmate**
- ✓ One personally created Desmos activity that you link in your google classroom. This activity must have a minimum of 12 slides
- ✓ A minimum of 3 assessments (formative or summative or both) embedded throughout your weeks’ worth of lessons

Scoring Rubric

Weekly Curriculum Map

Component and Standards	3	2	1	Score & Comments
Quality and Completion of Map (CAEP EE 1.a, 2.b, 3.c)	The candidate creates a thorough, 5-day, developmentally appropriate, challenging learning map with all sections complete. The map demonstrates the candidate’s strong understanding of mathematical concepts and applications. There is clear alignment and connectivity between each lesson’s goals, materials, learning activities, and assessments.	The candidate creates a 5-day, developmentally appropriate learning map with all sections complete. The map demonstrates the candidate’s understanding of mathematical concepts and applications. The lesson’s goals, materials, learning activities, and assessments are mostly aligned, though there may be a few gaps or inconsistencies.	The candidate creates a 5-day learning map. Some sections may be incomplete or missing critical information. There are significant gaps or lack of alignment between the lesson’s goals, materials, learning activities, and assessments.	

Five Daily Lessons

Component	3	2	1	Score & Comments
Overall Cohesiveness/Quality of the 5-day learning sequence (CAEP EE 4.b)	The overall 5-day learning sequence presented in google classroom is cohesive, well-scaffolded, developmentally appropriate, and challenging	The overall 5-day learning sequence presented in google classroom is cohesive, demonstrates sufficient scaffolding (with perhaps some room for improvement) and contains instruction and activities that are developmentally appropriate	The 5-day learning sequence presented in google classroom lacks cohesion, sufficient scaffolding, OR contains instruction and activities that fail to be developmentally appropriate.	
Monday's Lesson (CAEP EE 3.a, 3.c, 4.a, 4.c)	In google classroom, the goals and tasks of Monday's lesson are very clear. The instructional strategies are engaging and appropriate to the math concepts and skills being taught (if applicable). All aspects of instruction, including the assessments are well-aligned.	In google classroom, the goals and tasks of Monday's lesson are clear. The instructional strategies are appropriate to the math concepts and skills taught (if applicable). There is overall alignment between the whole lesson, with some minimal improvements needed.	In google classroom, the goals and tasks of Monday's lesson lack clarity OR the instructional strategies are NOT appropriate to the math concepts and skills being taught. Alignment between the lesson goals, instruction, and assessments needs improvement.	
Tuesday's Lesson (CAEP EE 3.a, 3.c, 4.a, 4.c)	In google classroom, the goals and tasks of Tuesday's lesson are very clear. The instructional strategies are engaging and appropriate to the math concepts and skills being taught (if applicable). All aspects of the instruction, including the assessments are well-aligned.	In google classroom, the goals and tasks of Tuesday's lesson are clear. The instructional strategies are appropriate to the math concepts and skills taught (if applicable). There is overall alignment between the whole lesson, with some minimal improvements needed	In google classroom, the goals and tasks of Tuesday's lesson lack clarity OR the instructional strategies are NOT appropriate to the math concepts and skills being taught. Alignment between the lesson goals, instruction, and assessments needs improvement.	
Wednesday's Lesson (CAEP EE 3.a, 3.c, 4.a, 4.c)	In google classroom, the goals and tasks of Wednesday's lesson are very clear. The instructional strategies are engaging and appropriate to the math concepts and skills being taught (if applicable). All aspects of the instruction, including the assessments are well-aligned.	In google classroom, the goals and tasks of Wednesday's lesson are clear. The instructional strategies are appropriate to the math concepts and skills taught (if applicable). There is overall alignment between the whole lesson, with some minimal improvements needed	In google classroom, the goals and tasks of Wednesday's lesson lack clarity OR the instructional strategies are NOT appropriate to the math concepts and skills being taught. Alignment between the lesson goals, instruction, and assessments needs improvement.	
Thursday' Lesson (CAEP EE 3.a, 3.c, 4.a, 4.c)	In google classroom, the goals and tasks of Thursday's lesson are very clear. The instructional strategies are engaging and appropriate to the	In google classroom, the goals and tasks of Thursday's lesson are clear. The instructional strategies are appropriate to the math concepts and	In google classroom, the goals and tasks of Thursday's lesson lack clarity OR the instructional strategies are NOT appropriate to the math concepts	

	math concepts and skills being taught (if applicable). All aspects of the instruction, including the assessments are well-aligned.	skills taught (if applicable). There is overall alignment between the whole lesson, with some minimal improvements needed	and skills being taught. Alignment between the lesson goals, instruction, and assessments needs improvement.	
Friday's lesson (CAEP EE 3.a, 3.c, 4.a, 4.c)	In google classroom, the goals and tasks of Friday's lesson are very clear. The instructional strategies are engaging and appropriate to the math concepts and skills being taught (if applicable). All aspects of the instruction, including the assessments are well-aligned.	In google classroom, the goals and tasks of Friday's lesson are clear. The instructional strategies are appropriate to the math concepts and skills taught (if applicable). There is overall alignment between the whole lesson, with some minimal improvements needed	In google classroom, the goals and tasks of Friday's lesson lack clarity OR the instructional strategies are NOT appropriate to the math concepts and skills being taught. Alignment between the lesson goals, instruction, and assessments needs improvement.	

Videoed Instruction (score here will be doubled – these two videos do NOT include your videoed Zoom session)

Component	3	2	1	Score & Comments
Instructional Quality (CAEP EE 2.b, 4.a, 4.c)	At least two videos of direct instruction are embedded in the google classroom, together totaling at least 15 minutes. The quality of the instruction is exceptional and developmentally appropriate. The strategies employed are very well-suited to the concepts and skills being taught. The instruction promotes student mastery of the concepts and skills and encourages student engagement through scaffolded explanations, purposeful questioning, and/or active student participation.	At least two videos of direct instruction are embedded in the google classroom and are close to totaling 15 minutes of instruction. The instructional strategies employed in the video are very well-suited to the concepts and skills being taught. The instruction is mostly clear and promotes student mastery of the concepts and skills but could use minimal improvements in clarity, developmental appropriateness, scaffolding, or purposeful questioning.	Only one video of direct instruction is embedded in the google classroom OR Two videos of direct instruction are embedded in the google classroom but fall very short of the combined minimum of 15 minutes of instruction. OR Two Videos of direct instruction are embedded and meet the minimum 15 minutes of instruction, but the instruction is either unclear or the strategies developmentally inappropriate or not suited to the concepts being taught.	

Zoom Session

Component	3	2	1	Score & Comments
Quality of Instruction (CAEP EE 4.c)	A zoom meeting link and a recorded zoom session, demonstrating the teaching of a standards-aligned mathematics objective to another classmate is embedded in the google classroom. The instruction is a minimum of 7 minutes. The instruction is engaging, student-centered, clear, and fitting to the concept or skill being taught	A zoom meeting link and a recorded zoom session, demonstrating the teaching of a standards-aligned mathematics objective to another classmate is embedded in the classroom. The instruction is a minimum of 7 minutes. For the most part, the instruction is clear and aligns to the content being taught	A recorded zoom session, demonstrating the teaching of a standards-aligned mathematics objective is embedded in the classroom. Some important features (minimal target time, clarity, etc.) are lacking	

Desmos Activity

Component	3	2	1	Score & Comments
Quality of Instruction (CAEP EE 4.a, 4.c)	Candidate's Desmos lesson integrates <i>several</i> elements of effective mathematics lesson planning and implementation, such as questions eliciting higher level thinking, invented strategies productive struggle, & guided inquiry	Candidate's Desmos lesson integrates some elements of effective mathematics lesson planning and implementation, such as questions eliciting higher level thinking, invented strategies productive struggle, & guided inquiry	Candidate's Desmos lesson fails to integrate elements of effective mathematics lesson planning and implementation such as questions eliciting higher level thinking, invented strategies productive struggle, & guided inquiry	
Standards-alignment and assessment quality (CAEP EE 3.a, 3.c)	The Desmos lesson is standards-based AND contains a minimum of 12 interactive slides that holistically promote and assess student mastery of the standards-based objectives of the lesson.	The Desmos lesson is standards-based and both instruction and assessment relate to the standard	The Desmos lesson is standards-based, but either the instruction OR the assessment fail to relate to the standard	

Assessments

Component	3	2	1	Score & Comments
Assessment Quality (CAEP EE 3.a)	A minimum of 3 formative or summative assessments are employed throughout the weekly learning sequence. These assessments are developmentally appropriate, challenging, and well-aligned to both the learning objectives and instruction.	A minimum of 3 formative or summative assessments are employed throughout the weekly learning sequence. These assessments are developmentally appropriate and aligned to both the learning objectives and instruction.	Fewer than 3 assessments are employed throughout the weekly learning sequence OR The assessments significantly lack in their developmental appropriateness or alignment to the learning objectives and instruction.	

Total Score (Out of 39 possible Points)	Feedback