University of New England
EDU 373: Teaching Math, K-8
Interactive Fieldwork Journal

Spring 2025

Student Name: Quinn Weaver	Mentor Teacher: Tracey Galante Grade Level: 3

Date	SUGGESTED Focus Area	Additional Thoughts
2/4 Interactive Journal 1	*Observation of Classroom and Structure of the Math Block*	Classroom Design & Structure Scheduling of the Math Block
2/11 Interactive Journal 2	*Observation of Inclusive Classroom Management Strategies*	Management strategies used to create an inclusive and effective learning community Choose the two students you will create Instructional/Intervention plans for later in the course. Observe and work with these students.
2/25 Interactive Journal 3	*Data and Assessment*	Classroom Level Formative Assessments (whole group and small group) Conducting and Evaluating an Assessment if teacher is comfortable with this or needs this from you
3/4 Interactive Journal 4	*Teaching*	Whole Group, Small Group, and/or Individual Instruction
3/11 Interactive Journal 5	*Data and Assessment*	Benchmark & District Assessments How does the teacher use this data?
3/25 Interactive Journal 6	*Teaching*	Whole Group, Small Group, and/or Individual Instruction
4/1 Interactive Journal 7	*MTSS*	How does your teacher communicate that there are students who are not meeting standards? What's the framework of the support system in the school? Logistics?
4/8 Interactive Journal 8	*Teaching*	Whole Group, Small Group, and/or Individual Instruction

February 4, 2025	
Observation: Classroom Design and Structure	
Prepare	
What might you observe or look for?	Classroom Layout Student Materials and Resources Teacher Materials and Resources Classroom routines and procedures Student Engagement Levels Feel of the Classroom
What might you ask?	How do you check for understanding? How do you know the students are progressing? How do you help the students who are falling behind in math? How do you keep materials organized?
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☐ Calendar Math/Number Talks/Problem of the Day ☐ Explicit teaching of mathematical goal setting ☑ ~~Using and connecting mathematical representations~~ ☑ ~~Facilitating mathematical discourse~~ ☑ ~~Purposeful questioning~~ ☑ ~~Building procedural fluency from conceptual understanding~~ ☑ ~~Support of productive struggle~~ ☑ ~~Eliciting and using evidence of student thinking~~ ☑ ~~Explicit teaching of computational strategies~~ ☑ ~~Differentiation~~ ☐ Leveled/Skill-Based/Strategy Groups ☐ Formative Assessment ☑ ~~Working with struggling mathematicians/Intervention~~ ☑ ~~Integration of technology~~ ☐ Support of multilingual learners	*What did you observe?* -i do, we do, you do looked a bit different but it was still the same idea -1. Fluency, students worked on their fluency with multiplication, this was the beginning of math, I think this helped to warm up their brains and get them in math mode 2. Launch- setting up for learning, making observations, talking as a whole class 3. Learn- teaching it and doing whole class examples, showing 2 different ways to solve the problem, letting students choose the beginning of how they approach the problem -asking meaningful questions like what did you notice about these shapes -students did 3 problems independently after a gradual release - i noticed some students struggle more than others 4. land- review what has been learned as a whole class -exit ticket- we didn't get to this -classroom layout was great, the environment was positive -students each have their own math books they work out of -lesson is taught on board by teacher -students need to have transition time before math (take off snow stuff)

What did you see/hear related to *classroom design and structure*?	I saw gradual release within the lesson	
What strategies did the teacher use for classroom management?	Giving frequent reminders to students about things, using timers for certain things	
Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.	❤️ loved how the teacher waited for more students to have hands up so that their brains had more time to process what was being asked I liked how a question was brought back to whole instruction if teacher noticed students were struggling	💡 I loved how Mrs. Galante's classroom was immersed with student art, it really made it feel homey and like a safe inclusive environment
	👀/👂	**???** - For Class or CT I am wondering about what goals I can set for myself to reach by the end of this experience

Research Question and Data Collection	
How can you make sure differentiation is individualized? How do we ensure our differentiation strategies are effectively meeting needs?	In order to individualize differentiation, teachers need to be able to mark each students strength and weakness Formative and summative assessment can help us figure out if our differentiation approaches are effective

February 11, 2025
Observation: Inclusive Classroom Management Strategies
Prepare

What might you observe or look for?	Was absent- will try to make it up at some point
What might you ask?	
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☐ Calendar Math/Number Talks/Problem of the Day ☐ Explicit teaching of mathematical goal setting ☐ Using and connecting mathematical representations ☐ Facilitating mathematical discourse ☐ Purposeful questioning ☐ Building procedural fluency from conceptual understanding ☐ Support of productive struggle ☐ Eliciting and using evidence of student thinking ☐ Explicit teaching of computational strategies ☐ Differentiation ☐ Leveled/Skill-Based/Strategy Groups ☐ Formative Assessment ☐ Working with struggling mathematicians/Intervention ☐ Integration of technology ☐ Support of multilingual learners	*What did you observe?*
What did you see/hear related to *Inclusive Classroom Management*?	
Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.	❤️ / 👀 / 👂
	💡 / ???
Research questions and data collection	
How can you make sure differentiation is individualized? HOw do we ensure our	

differentiation strategies are effectively meeting needs?	

February 25, 2025	
Data and Assessment: Classroom Level Formative Assessments	
Prepare	
What might you observe or look for?	Assessment Tools and Resources Assessment Materials Organization of data Use of data in lesson planning Use of assessment in whole group vs small group instruction
What might you ask?	How can you figure out if a student really grasps the whole concept?
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☐ Calendar Math/Number Talks/Problem of the Day ☑ ~~Explicit teaching of mathematical goal setting~~ ☑ ~~Using and connecting mathematical representations~~ ☑ ~~Facilitating mathematical discourse~~ ☑ ~~Purposeful questioning~~ ☑ ~~Building procedural fluency from conceptual understanding~~ ☑ ~~Support of productive struggle~~ ☑ ~~Eliciting and using evidence of student thinking~~ ☑ ~~Explicit teaching of computational strategies~~ ☑ ~~Differentiation~~ ☑ ~~Leveled/Skill Based/Strategy Groups~~ ☑ ~~Formative Assessment~~ ☑ ~~Working with struggling mathematicians/Intervention~~ ☐ Integration of technology ☐ Support of multilingual learners	*What did you observe?* 1. Fluency- monster math, fluency, multiplication facts, reviewing what was learned yesterday, making a learning target, activation of prior knowledge 2. Launch- waiting for more people to raise their hand before she goes on to tell the answer, this is feel is forcing students to think about it, sort of like a productive struggle, 3. Learn- comparing pictures, how are they the same, how are they different? Going over every different way, incorporating measuring units into the lesson as well, then the students practice partitioning shapes into fractional units on a worksheet, I saw a lot of purposeful questioning, the teacher is constantly asking students WHY is it this way, HOW can you tell? This builds procedural fluency -class does worksheet then goes over it all together -teacher shows many different ways the shape can be partitioned, this to me feel like some sort of differentiation because some peoples brains may only see something one way, and that is the only thing that works for them. -exit ticket after, students were required to complete around 4 problems in their workbook -key math words on the board -lots of connecting mathematical representations -differentiation, some students got extra time with monster math
What did you see/hear related to *formative assessment*?	I saw exit tickets, worksheets that were to be done as a class, and lots of observing done by the teacher

Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.	❤️ i love how she waits for more people to raise their hand before answering the questions	💡 Waiting for more people to raise hand before answering questions
	👀/ 👂 How does the multiplication facts tie into the lesson or does it not	???
Research questions and data collect		
How can you make sure differentiation is individualized? HOw do we ensure our differentiation strategies are effectively meeting needs?		

March 4, 2025	
Teaching: Whole Group, Small Group, and/or Individual Instruction	
Prepare	
What might you observe or look for?	Physical layout of classroom Organization of small group materials/resources Management strategies during small group instruction time Classroom routines during small group instruction time Student grouping strategies Lesson planning for small groups
What might you ask?	
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☐ Calendar Math/Number Talks/Problem	*What did you observe?* • 1. Fluency- monster math to warm up brain they are doing multiplication • Fluency is around 10 min, they start by reviewing what was learned previously • Teacher shows different number combinations and shows all possible answers, this is using evidence from student thinking

<table>
<tr>
<td>of the Day
☑ ~~Explicit teaching of mathematical goal setting~~
☑ ~~Using and connecting mathematical representations~~
☑ ~~Facilitating mathematical discourse~~
☑ ~~Purposeful questioning~~
☑ ~~Building procedural fluency from conceptual understanding~~
☑ ~~Support of productive struggle~~
☑ ~~Eliciting and using evidence of student thinking~~
☑ ~~Explicit teaching of computational strategies~~
☑ ~~Vocabulary and Word Work~~
☑ ~~Differentiation~~
☑ ~~Leveled/Skill-Based/Strategy Groups~~
☑ ~~Formative Assessment~~
☑ ~~Working with struggling mathematicians/Intervention~~
☐ Integration of technology
☐ Support of multilingual learners</td>
<td colspan="2">• Whole class instruction- using purposeful questioning and refreshing units
• “This all builds into next week's lesson” this is similar to setting mathematical goals, students understand they need to know this before they can move on to the next lesson
• Teacher asks questions to build procedural fluency, they can say the answer but she always asks why
• Launch- draw a picture, let students solve, give time, then write answers on board, this helps promote productive struggle (we do)
• Learn- each student got plastic fraction tiles and were building fractions, this shows that 1 whole is equal to 3 ⅓ or 3/3. This helps build procedural fluency as well
• Modification to lesson
• Having students mimic whats on board with tiles
• Using vocabulary such as equivalent, checking in to make sure all students know this word
• Land, have students try a few questions</td>
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<td>What did you see/hear related to small group and individual instruction?</td>
<td colspan="2">We did small group talking, so kids would discuss their answers in small groups, I did not see individual instruction</td>
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<td rowspan="2">Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.</td>
<td>❤️
• Asking why
• Remembering it is okay to modify lessons
• The learning target- students know what they are expected to learn
• Drawing pictures with fractions
• Complimenting students “I love how” this is boosting confidence
• Asking purposeful questions
• Giving students time to think before they answer the question
• Supplies used (fraction tiles)
• If you have time- extra problems for the kids that are ahead</td>
<td>💡
-build on what we have been learning
-complimenting students
“Today we will” so students know what to expect
-explaining to class why there using what they are using to learn
“What do you notice about this?
“ANy questions”</td>
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<td>👀/👂
• Heard lots of vocab being immersed into unit
• Heard the teacher say to me” this is a perfect example of modification because they were doing something different</td>
<td>???
-just an idea, maybe give students around 1 minute to play with tiles before they use them so that they get it all out</td>
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	(using plastic tiles opposed to the papers that the lesson provided)	
Research questions and data collect		
How can you make sure differentiation is individualized? HOw do we ensure our differentiation strategies are effectively meeting needs?	Need to change research question	

March 11, 2025	
Assessment: Benchmark and District Assessments	
Prepare	
What might you observe or look for?	District/benchmark assessment tools District/benchmark/grade level assessment calendar Administration of district/benchmark assessment Use of assessment data to inform and support whole group or small group instruction
What might you ask?	
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☐ Calendar Math/Number Talks/Problem of the Day ☑ ~~Explicit teaching of mathematical goal setting~~ ☑ ~~Using and connecting mathematical representations~~ ☑ ~~Facilitating mathematical discourse~~ ☑ ~~Purposeful questioning~~ ☑ ~~Building procedural fluency from conceptual understanding~~ ☑ ~~Support of productive struggle~~ ☑ ~~Eliciting and using evidence of student thinking~~ ☑ ~~Explicit teaching of computational strategies~~ ☑ ~~Vocabulary and Word Work~~ ☑ ~~Differentiation~~ ☑ ~~Leveled/Skill-Based/Strategy Groups~~ ☑ ~~Formative Assessment~~	*What did you observe?* *-monster math- was first, differentiation because some students have more time than others* *- skipped over fluency because monster math was like the fluency* *-i did the launch for the lesson today, we went over different units of 3, this is the start of them comparing fractions* *- i went through it and called on different students to ask what is the same and different about the pictures* *-learn they students did problems altogether, talked with their groups*

☑ ~~Working with struggling mathematicians/Intervention~~ ☐ Integration of technology ☐ Support of multilingual learners		
What did you see/hear related to *benchmark and district assessments*?	Monster math is a benchmark, (I think)	
Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.	❤️ -asking purposeful questions such as how do you know? WHy? This builds on procedural fluency -building students confidence by using positive reinforcement	💡 Waiting for multiple hands to be raised Using positive reinforcement to increase participation
	👀/ 👂 Saw many students being confused , but then after I went over a problem with them individually they could finally understand	???

Research questions and data collect	
How does the use of positive reinforcement influence student participation in math activities?	When I see students being positively being reinforced, I see more consistent participation. Never once has negative reinforcement in this class been used at least not that ive seen in math.
Students get really excited when they earn positive feedback, this leads to more confidence and more students will be willing to participate since they dont think theyu are going to get in trouble for answering wrong.	Teacher uses reinforcements such as “I know you guys know this” that helps them maybe realize that they do know i

March 25, 2025	
Teaching: Whole Group, Small Group, and/or Individual Instruction	
Prepare	
What might you observe or look for? What might you practice?	Physical layout of classroom Classroom routines and procedures Classroom management strategies Student engagement strategies Opportunities for differentiation (English Language Learners, students on IEPs,

	gifted learners) Lesson planning for whole group instruction Resources that support whole group instruction
What might you ask?	
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☐ Calendar Math/Number Talks/Problem of the Day ☑ ~~Explicit teaching of mathematical goal setting~~ ☑ ~~Using and connecting mathematical representations~~ ☑ ~~Facilitating mathematical discourse~~ ☑ ~~Purposeful questioning~~ ☑ ~~Building procedural fluency from conceptual understanding~~ ☑ ~~Support of productive struggle~~ ☑ ~~Eliciting and using evidence of student thinking~~ ☑ ~~Explicit teaching of computational strategies~~ ☑ ~~Vocabulary and Word Work~~ ☑ ~~Differentiation~~ ☑ ~~Leveled/Skill Based/Strategy Groups~~ ☑ ~~Formative Assessment~~ ☑ ~~Working with struggling mathematicians/Intervention~~ ☐ Integration of technology ☐ Support of multilingual learners	*<u>What did you observe or practice?</u>* -monster math 1st, students will practice multiplication facts, this is fluency -good classroom mamagement, students know exactly what to expect when coming back from specials, -starts with launch after monster math -real life situations in the launch, teacher made real life situations where every student designed their own “Pizza” where they could show fractions -this is an example of modification, going off the book if you need too because the book will not always work -resources that support whole group instruction are using real life situations -in the book another real life situation used with a track showing fractions -i think the real life examples help the students paint a picture in their head which will make more sense to them - i had an “aha” moment with a student when I explained fractions to him in “Pizza terms” literally. -Purposeful questioning is very helpful for procedural fluency, causes students to think about WHY they chose the answer they did, I love to be able to see this in the classroom when students minds start turning due to a question asked -if someone isnt paying attention, instead of embarasasing that student and calling them otu separately, address the entire class as a whole and let them know I am looking to see who is paying attention and who is not. “Ill wait to go on until I have everyones focus” This grabs attention of students who may be not payong attention without actually putting them in an uncomfortable situation -love the bucket filling poster in the classroom - i see alot of students giving other students positive reinforcement
What did you learn from your teaching?	I learned that there are so many different strategies to keep a class engaged, extrinsic motivation being one of them for example “if you guys can get through this activity we are going to have free time at the end of the day. Using positive reinforcement opposed to negative reinforcement is extremely helpful
Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.	❤️ -love the question how did you figure that out? -purposeful questioning -modification to lesson using examples that will make more sense for fractions, such as pizza or a track, asking them how it
	💡 The name tag on monster math says “smartie” so each student has a reminder they are smart when they write their names!

	can be partitioned if its in halves etc -restating things constantly	
	👀/ 👂 see alot of students giving other students positive reinforcement	???
Research questions and data collection		
How does the use of positive reinforcement influence student participation in math activities	-increases motivation -builds confidence -creates a positive learning environment -fosters a growth mindset	

April 1, 2025	
Instructional and Intervention: Multi-Tiered System of Supports (MTSS/RTI)	
Prepare	
What might you observe or look for?	Collection of data Interpretation of data Application of data analysis in informing instruction
What might you ask?	How does the teacher communicate with the team about students who are not meeting standards? Is there a team? What does this look like? When do they meet? What are the interventions like? How long do they last? What is the structure of the system? Is there evidence of students in your classroom receiving interventions?
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☑ ~~Calendar Math/Number Talks/Problem of the Day~~ ☑ ~~Explicit teaching of mathematical goal setting~~ ☑ ~~Using and connecting mathematical representations~~ ☑ ~~Facilitating mathematical discourse~~ ☑ ~~Purposeful questioning~~ ☑ ~~Building procedural fluency from conceptual understanding~~	*What did you observe?* How does the teacher communicate with the team about students who are not meeting standards?- she usually addresses the class as a whole and says that if anyone has questions to let her know. She does not call out students individually she just gives a reminder and will make eye cionatc with some students who may not be meeting those standards Monster math o jumpstart brain and fluency Kids were so excited to see me today! -review for fraction test tomorrow, next week I believe I will be doing a small group lesson with a few students who need intervention -going over each question in packet and reiterating what is asked of the students to do

☑ ~~Support of productive struggle~~ ☑ ~~Eliciting and using evidence of student thinking~~ ☑ ~~Explicit teaching of computational strategies~~ ☑ ~~Vocabulary and Word Work~~ ☑ ~~Differentiation~~ ☑ ~~Leveled/Skill-Based/Strategy Groups~~ ☑ ~~Formative Assessment~~ ☑ ~~Working with struggling mathematicians/Intervention~~ ☑ ~~Integration of technology~~ ☐ Support of multilingual learners	-giving students a heads up on what questions may be challenging -students do review alone, then go over it as a group -test looks almost identical to review -students will know what to expect on the test tomorrow -noticed a student that excelled and moved onto something harder on his own	
What did you learn about the school's MTSS?		
Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.	❤️	💡
	👀/👂	??? -a little confused because the teacher said that the students dont need to take review packets home, I figured they would want to so they would be able to look over it
Research question and data collection		
How can you make sure differentiation is individualized? HOw do we ensure our differentiation strategies are effectively meeting needs?		

April 8, 2025	
Teaching: Whole Group, Small Group, and/or Individual Instruction	
Prepare	
What might you observe or look for?	Lesson Planning Behavior management strategies Student engagement strategies

What might you practice?	Opportunities for differentiation (English Language Learners, students on IEPs, gifted learners) Resources and materials Assessment tools
What might you ask?	
Reflect	
Observations of Pedagogy and Content *Check all that you observed:* ☐ Calendar Math/Number Talks/Problem of the Day ☐ Explicit teaching of mathematical goal setting ☐ Using and connecting mathematical representations ☐ Facilitating mathematical discourse ☐ Purposeful questioning ☐ Building procedural fluency from conceptual understanding ☐ Support of productive struggle ☐ Eliciting and using evidence of student thinking ☐ Explicit teaching of computational strategies ☐ Vocabulary and Word Work ☐ Differentiation ☐ Leveled/Skill-Based/Strategy Groups ☐ Formative Assessment ☐ Working with struggling mathematicians/Intervention ☐ Integration of technology ☐ Support of multilingual learners	*What did you observe or practice?*
What did you learn by teaching?	
Connect our class discussions to what you are seeing in the classroom. Similarities, differences, wonders, light bulbs, loves, questions, etc.	❤️ / 💡 👀 / 👂 / ???
Research question and data collection	
How can you make sure differentiation is individualized? HOw do we ensure our	

differentiation strategies are effectively meeting needs?	