C21. Syllabus 287b

SCHOOL OF EDUCATION AND COUNSELING PSYCHOLOGY

Department of Education
MATTC
EDUC 287B (3 units)
Secondary Mathematics Methods II (3 units)
Winter

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Course Meeting Dates: Tuesdays, 4:30-7:30 pm

Mission and Goals of the Department of Education
Rooted in the Jesuit tradition at Santa Clara University, the mission of the Department of Education is to prepare professionals of competence, conscience, and compassion who will promote the common good as they transform lives, schools, and communities. Our core values of reflective practice, scholarship, diversity, ethical conduct, social justice, and collaboration guide both theory and practice.

Faculty, staff, and students in the Department of Education:

- Make student learning our central focus
- Engage continuously in reflective and scholarly practice
- Value diversity
- Become leaders who model ethical conduct and a commitment to social justice
- Seek collaboration with others in reaching these goals

MS/SS Teaching Credential Program Learning Goals (PLGs)
The PLGs represent our commitment to individuals who earn their MS/SS credential at Santa Clara University. The MS/SS faculty focus on ensuring each student will begin their teaching career ready to:

1. Maximize learning for every student.
2. Teach for student understanding.
3. Make evidence-based instructional decisions informed by student assessment data.
4. Improve your practice through critical reflection and collaboration.
5. Create productive, supportive learning environments.
6. Apply ethical principles to your professional decision-making

The PLGs guide our program. Therefore, all MS/SS teaching credential program course objectives are cross-referenced with the PLGs. (A fully elaborated version of the MS/SS PLGs can be found in the Teacher Candidate Handbook, Pre-Service Pathway.)

Course Description

EDUC 288 (Secondary Math Methods II) course is Part 2 of a two-course sequence in secondary mathematics teaching methods. This sequence is designed to provide teacher candidates with a coherent set of experiences for mathematics teaching and learning in secondary schools. Through assigned readings, classroom discussions, content rich mathematics activities, and assignments that require data collection in your field placement, you will be supported as you make sense of how to approach the profession of teaching. Through thinking about ourselves as teachers, examining classroom culture and structures, facilitating mathematical discussions, and assessing student work, we will set the stage for our development as secondary mathematics teachers. We will focus on inclusive practices that supports students with disabilities in LRE.

Course Objectives

This course will develop students' knowledge of or skills with…		*Standard/Goals Addressed*			
		DG #	***PLG #***	***TPE #***	***MSSN TPE #***
1	Examining knowledge, beliefs, and assumptions about mathematics, teaching, and students, with particular attention to the impact language, culture, socio-economic status, and identified disabilities have had on mathematical learning opportunities.	2	4,6	(6.2) 6.5	
2	Increasing knowledge of mathematics content	1	1	3.1	
3	Increasing theoretical knowledge and practical experience in planning, teaching, and assessing mathematics learning, with particular attention for how modify teaching to meet the needs assess and support engagement of diverse learners while maintaining the cognitive demand of tasks.	1,3	1,2,3	1.3,1.6,2.2 ,3.4,3.5,4. 1	1.1, 1.2, 1.7, 2.4, 3.1, 3.2, 4.4, 4.7, , 5.1, 5.2, 5.6
4	Understanding the mathematical needs of a diverse range of students and adopting an asset-based view of students and families, particularly from populations that have traditionally been	1,3	1,2,5	1.1,1.6	2.4, 3.1, 3.2, 4.4, 4.7

	positioned as low status in mathematics classrooms.				
5	Understanding the complexities of diverse, multiple-ability classrooms while broadening your repertoire of teaching techniques to engage and assess all students, including students with identified disabilities, in rich, complex, and multi-dimensional mathematics.	2,5	1,5	1.1,1.3,1.6 ,2.2,3.5	1.4, 2.1, 2.4, 2.8, 2.9, 2.10,3.1, 3.2, 4.4, 4.7, 5.1, 5.2, 5.6
6	Learning from experiences in schools through informed reflection	2,4	4	(6.1)*,6.5	
*DG=Department Goals; PLG=Program Learning Goal; TPE=Teaching Performance Expectation Standard; TPA=Teaching Performance Assessment					

*TPEs in ()s denotes continuation from previous course.

Required Texts
Stein & Smith. (2011). *5 Practices for Orchestrating Productive Mathematics Discussions*

Course Requirements/Assignments
Grades are based on a 100-point total. Distribution of points across assignments is as follows:

Course/Requirements/Assignments		Points	TPE Assessed	MMSN
1	Classroom Norms Assignment	10	1.1,1.3,1.6,2. 2,3.5,6.5	4.4
2	Modifying Task Assignment	30	1.1,1.3,1.6,2. 2,3.4,3.5,4.1, 6.1	1.1, 1.2, 1.4,2.1, 3.2, 4.7, 5.1,5.6
3	Facilitate Discussion around math and social justice	10		2.4
4	Multidimensional Math Task Assignment	50	1.1,1.3,1.6,2. 2,3.4,3.5,4.1, 6.1	1.1, 1.2, 1.7, 2.1, 2.8, 2.9, 2.10, 3.1,4.4, 4.7, 5.1, 5.2, 5.6

1. **Classroom Norms Assignment:** The purpose of this assignment is to reflect on the mathematical culture being established in your classroom. The assignment focuses on:

- The teachers' questions, instructions, and feedback to students
- The role(s) of the students with particular attention to how different subgroups of students are positioned in the mathematics classroom based on background (e.g., linguistic, cultural, socioeconomic, identified disability) (Practice/Asesss MMSN 4.4).
- Opportunities provided for communication, collaboration, etc., and
- The mathematical tasks, and opportunities provided for representation, problem-solving, making connections.

2. **Modifying Task Assignment:** The purpose of the task is to analyze the cognitive demand of an existing routine mathematics task (e.g., warm up or exit ticket), increase the cognitive demand of the task, implement the task with students, and assess student thinking. In modifying the task you will write a set of multi-dimensional learning objectives and identify modifications and supports for ELs and students with identified disabilities that do not lower the cognitive demand of the mathematical task using UDL. Additionally, students will identify specific modifications and supports for a student with an IEP, as well monitor student progress as specified by the IEP (end of syllabi for assignment and grading/points) (Practice/Assess MMSN TPE 1.1, 1.2, 1.4,2.1, 3.2, 4.7, 5.1,5.6) .

3. **Facilitate Discussion on Math and Social Justice:** The purpose of this assignment is to practice having discussions with students about how math relates to social justice. You will identify a relevant current issue and identify the relevant mathematical ideas. Then you will facilitate a brief discussion around the issue.

4. **Multidimensional Math Task Assignment** *(Signature Assignment* - see end of syllabi for assignment and rubric*):* The purpose of this assignment is to implement a multidimensional mathematical task in placement classrooms. During this assignment teacher candidates will need to design a task that has multiple entry points (e.g., low-floor high-ceiling) and is mathematically rich in nature. Teacher candidates will then implement the task in their placement classrooms and orchestrate a discussion around group's strategies. The teacher candidate will then analyze student work and adjust instruction accordingly. Key skills developed during this task include:

- Writing multi-dimensional and assessable learning objectives for students
- Identifying accommodation and supports for English Learners and students with identified disabilities that do not lower the cognitive demand of the mathematical task.
- Monitor academic progress of a student with IEP.
- Designing formative assessments linked to learning objectives and student interests and engagement.
- Designing criteria for assessing student work in relation to the learning objectives.
- Making sense of students' written mathematical work on an assessment
- Adjusting instruction based on principles of formative assessment
- Analytically reflect on teaching practice

MMSN TPEs Practice/Assessed: 1.1, 1.2, 1.7, 2.1, 2.8, 2.9, 2.10, 3.1, 4.4, 4.7, 5.1, 5.2, 5.6

Assessments & Grading Criteria

1. All written and oral assignments must reflect graduate-level standards. As a future teacher, you must be able to model communication skills for your students.

2. Attendance and participation in all class meetings is required. If you are going to be absent from class, you must email or call me to inform me of your absence. You will still be responsible for all missed content and in-class work.

3. Letter grades are assigned on the standard scale based upon a possible total of 100 points.

A	94-100	**C+**	77-79
A-	90-93	**C**	74-76
B+	87-89	**C-**	70-73
B	84-86	**D+**	67-69
B-	80-83	**D**	63-66

4. Assignments done in pairs, both partners will receive the same grade, unless otherwise stated.

5. Final grades will reflect students' contributions (e.g., attendance, class discussions, quality of presentation, ability to lead discussion groups, completion and quality of course assignments), critical thinking and ability/degree to which student integrates theory, research and practice.

6. All assignments are expected on their due dates in the room where our class meets. I cannot be responsible for papers submitted at other times or in other formats. Unless we have made special arrangements beforehand, late assignments will be docked 3 points for each day past the due date that they are submitted.

Regular attendance at all class meetings is a requirement in this program. Ten points will be deducted from your final grade for the course for each class session you missed. Each of you will be granted one Emergency Release (ER) per course. Your ER excuses you from one class session with half the grade penalty (loss of 5 points instead of 10). To use your ER you must notify me by email or phone BEFORE class. Save your ER for medical issues, family demands, car trouble, etc.

Students will not be penalized for absences due to the observance of religious holidays that fall on our scheduled class day; please give me advance notice of these absences so I can make the necessary accommodations. All other absences are unexcused and will affect your grade.

Punctuality. Coming to class (and returning from breaks) on time is another course requirement. Your first lateness will be excused; your second lateness will cause 1 point to be deducted from your final course grade; your third lateness will cause an additional 4 points to be deducted. More than three late arrivals indicate a serious problem; this situation will be dealt with at the instructor's discretion. Attendance and punctuality are the only policies with the immediate potential to impact your course grades. Your instructor through ongoing observation and documentation gathers data documenting your adherence to the remaining policies listed here.

If an instructor has reason to feel you are not meeting all the expectations spelled out below, s/he will contact you privately to discuss the issue, to clarify the expectations as needed, and to offer his/her support in helping you reach those expectations. If your instructor does not contact you with a concern, you can assume you are satisfying these requirements. However, if you would like specific feedback on your professional conduct during the quarter, you are welcome to contact your instructor at any time and s/he will be glad to share his/her assessment with you.

As we will read about and study in this course, everyone's learning is enhanced by the quantity and quality of the interactions in the learning environment. Hence, your participation in whole class discussions, group work and pair group is essential for the success of this course.

While a class is in session, you should not engage in any activity not directly related to what is taking place in the classroom. Instructors reserve the right to ask you to close your laptop or put away some other form of technology at their discretion; when/if this occurs, please respond quickly and without protest to avoid further disruption of the class's learning. Instructors also reserve the right to ignore your inappropriate use of technology in class and simply deduct points from your final grade. If you would like more detailed clarification about the expectations regarding appropriate and inappropriate in-class technology use, please feel free to contact your instructor for further information.

Note: Points lost due to poor attendance and/or lack of punctuality will be deducted from your final grade. A student with excellent grades on assignments and other aspects of professional conduct can earn a poor course grade as a result of excessive absence or chronic lateness.

Canvas/Camino Course Management System
To access course materials and participate in On-line activities, please be sure to review Canvas (also known as Camino). Reminders, tools, readings and assignment descriptions will be made available through this on-line course management system. Your SCU username and password gets you access to Canvas.

Disability Accommodations Procedure
If you have a disability for which accommodations may be required in this class, please contact Disabilities Resources, Benson 216, http://www.scu.edu/disabilities as soon as possible to discuss your needs and register for accommodations with the University. If you have already arranged accommodations through Disabilities Resources, please discuss them with me during my office hours. Students who have medical needs related to pregnancy may also be eligible for accommodations.

While I am happy to assist you, I am unable to provide accommodations until I have received verification from Disabilities Resources. The Disabilities Resources office will work with students and faculty to arrange proctored exams for students whose accommodations include double time for exams and/or

assisted technology. (Students with approved accommodations of time-and-a-half should talk with me as soon as possible). Disabilities Resources must be contacted in advance to schedule proctored examinations or to arrange other accommodations. The Disabilities Resources office would be grateful for advance notice of at least two weeks. For more information, you may contact Disabilities Resources at 408-554-4109.

Accommodations for Pregnancy and Parenting
In alignment with Title IX of the Education Amendments of 1972, and with the California Education Code, Section 66281.7, Santa Clara University provides reasonable accommodations to students who are pregnant, have recently experienced childbirth, and/or have medically related needs. Pregnant and parenting students can often arrange accommodations by working directly with their instructors, supervisors, or departments. Alternatively, a pregnant or parenting student experiencing related medical conditions may request accommodations through Disability Resources.

Discrimination and Sexual Misconduct (Title IX)
Santa Clara University upholds a zero-tolerance policy for discrimination, harassment and sexual misconduct. If you (or someone you know) have experienced discrimination or harassment, including sexual assault, domestic/dating violence, or stalking, I encourage you to tell someone promptly. For more information, please consult the University's Gender-Based Discrimination and Sexual Misconduct Policy at http://bit.ly/2ce1hBb or contact the University's EEO and Title IX Coordinator, Belinda Guthrie, at 408-554-3043, bguthrie@scu.edu. Reports may be submitted online through https://www.scu.edu/osl/report/ or anonymously through Ethicspoint https://www.scu.edu/hr/quick-links/ethicspoint/

Academic Integrity
The University is committed to academic excellence and integrity. Students are expected to do their own work and to cite any sources they use. A student who is guilty of dishonest acts in an examination, paper, or other required work for a course, or who assists others in such acts, will receive a grade of F for the course. In addition, a student guilty of dishonest acts will be immediately dismissed from the University. Students that violate copyright laws, including those covering the copying of software programs, or who knowingly alter official academic records from this or any other institution, are subject to disciplinary action (ECP Graduate Bulletin, 2013-2014)

Course Meeting	Course Topics	Course Readings
Session 1 1/7	Classroom Norms & Culture	In class readings: ● Kazemi, E. (1998). Discourse that promotes conceptual understanding. *Teaching Children Mathematics, 4*(7), 41 414. ● Boaler. (2014). Positive Classroom Norms. youcubed.org ● Lambert, R. (2018) "Indefensible, Illogical, and Unsupported": Countering Deficit Mythologies about the Potential of students with Learning Disabilities in Mathematics. (Introduce: MMSN: 2.1, 2.9, 3.1, 5.1, 6.3)
Session 2 1/14	Cultural Analysis of Teaching	● Stigler & Hiebert. (1999). *The Teaching Gap: Best Ideas from the World's Teachers for Improving Education in th Classroom.* The Free Press. (Chapter 6) ● OPTIONAL: Boaler & Humphreys. (2007). Chapter 4 Defending Reasonableness Division of Fractions.
Session 3 1/21	Assessing mathematical proficiency & designing assessments and rubrics	● Herbel-Eisenmann & Breyfoyle – Questioning our patter of questioning (2005) ● Review Universal Design Framework: https://udlguidelines.cast.org/ (Introduce and/or Practice MMSN: 1.1, 1.2, 2.1, 2.9, 2.10, 3.1, 5.2, 5.6)
Session 4 1/28	Launching Tasks	● Jackson, K. J., Shahan, E., Gibbons, L., & Cobb, P. (2012). Setting up complex tasks. *Mathematics Teaching in the Middl School*, (January), 1–15.
Session 5 2/4	Teaching for Social Justice (online session)	You will be assigned **one** reading: ● Rethinking Mathematics. Chapter 1. ● TODOS. Mathematics Education through the lens of soc justice.
Session 6 2/11	Anticipating and Monitoring	● Stein, M. K. & Smith, M. (2011). 5 practices for orchestrating productive mathematics discussions. Chapt and Chapter 4.

Session 7 2/18	Facilitating Discussions (Part 1) Accommodations for Students with Disabilities	• Stein, M. K. & Smith, M. (2011). 5 practices for orchestrating productive mathematics discussions. Ch 5 & 6 • What are Strategies for Teaching a student with a math-related Learning disability • (Introduce: MMSN TPE 5.1) • Practice MMSN: 2.1, 2.9, 2.10)
Session 8 2/25	Facilitating Discussions (Part 2)	• Chapin et al., (2003). The Tools of Classroom Talk. Ch 2 • Ball, (1993). With an Eye on the Mathematical Horizon: Dilemmas of Teaching Elementary School Mathematics. (optional)
Session 9 3/3	The Role of Technology (online session) (Introduce MMSN TPE: 4.1)	• Erlwanger, S. H. (1973). Benny's Conception of Rules a Answers in IPI Mathematics. • NCTM. (2008). The role of technology in the teaching a learning of mathematics. (2 paragraphs) • Gee, J. (2007). Good video games and good learning.
Session 10 3/10	History of Learning in Math Education & Learning from Practice	• Lambdin, D., & Walcott, C. (2007). Changes through the years: Connections between psychological learning theo and the school mathematics curriculum.

Assignment Excerpts with MMSN additions:

Modification of Task Assignment

Step 3. Modify a "small" formative assessment (e.g., warm up or exit ticket, classwork, etc.). (10 points) Be sure to include a self-assessment component.	What was the original task? (1 point)
	What is the modified task? (1 point)
	Describe what you did to modify the task and explain why you made the modifications. (2 points) (2-4 sentences)
	Describe modifications for the task ELs and students with identified disabilities and explain how such modifications maintain cognitive demand. (4 points) (Practice/Assess MMSN TPE 1.1, 1.2, 2.1, 3.1, 4.1,5.6) .

	Solve the task. Identify alternative solution strategies you anticipate might surface. Identify potential challenges, misconceptions, or errors you anticipate might surface. (2 points)

Step 4. Assess students. (5 points)	Design grading/feedback criteria for your task (e.g., points, rubric, etc.). Include criteria below. (4 points)
	Facilitate your task with at least 10 students, including an EL student and student with an identified disability. Assessing the whole class is fine. Collect all student work on the assessment. (1 point) (Practice/Assess: MMSN TPE 2.1, 4.4)

Step 5. Analyze and interpret your students' work on this assessment (9 points). *Make sure to reference specific evidence from student work samples.* You should include selections of specific student work in your analysis. Your analysis of the assessment should take into account both patterns that appear over the whole class *and* what you learn from individual students. You do not need to analyze all of the students in your study individually—*choosing two or three is fine*. You should identify patterns worth noting, and ones that should inform your teaching. For example, you might notice that about half of the students make a common mistake. You might also notice that one student had a particularly novel approach to solving a problem, or that you have an exciting insight into how a student understands a concept. Misconceptions are rich	Describe the patterns you notice across the student work in relation to each of your learning objectives. (3 points) 1. What areas of strength do you notice? (2-4 sentences) 2. What are students still struggling with? (2-4 sentences)
	How would you describe the progress of the students toward achieving the learning objectives? Be sure to specifically address progress of an EL student and a student with and identified disability (4 points) (2-4 sentences) (Practice/Assess: MMSN TPE 5.1, 5.2, 5.6)

opportunities that can inform exciting teaching and learning moments.	What did you learn about your students from the self/peer assessment part of your task? (2 points) (2-4 sentences)

Step 6. Adjust Instruction: (4 points)	Based on what you learned about the students on this assessment, what might they need next? Describe 2-4 *specific* next steps that you might take as a teacher to support the students to move forward. Be sure to specifically address next steps for an EL student in your class and for a student with an IEP in your class. (Practice/Assess: MMSN TPE 2.1, 4.4) .

Facilitating Complex Mathematics Task Assignment

Reflection

You can either write up your reflection in a 4-6 page double spaced paper or record your responses in an audio file. Address the following questions in your reflection:

1) General reflection: how did the lesson go? What things went well? What things did not go so well? Why do you think so? To what extent did the task enhance the lesson? How did the task impact student engagement? Student understanding?

2) The task: To what extent did you choose a worthwhile mathematical task? Was it clear? Did it allow students to investigate the mathematical concepts that you wanted to focus on in the lesson? Did it have multiple entry points for all learners, including language learners and students with identified disabilities? (Practice/Assess: MMSN TPE 1.1, 1.2, 2.1, 3.1, 4.1, 4.4, 5.6) .

3) Student's mathematical understanding: What did you learn about the students' thinking? What did they understand about the math concepts? What seemed to help them understand? What was hard for them to understand about the concept? Why do you think it was hard? How would you describe the mathematical understanding of language learners and students with identified disabilities? (Practice/Assess: MMSN TPE 5.1, 5.2, 5.6)

4) Your role in facilitating mathematical understanding: What did you do to facilitate student's mathematical understanding and how did it work? What kinds

of things did you notice yourself doing during the lesson to support, clarify, and extend students' thinking? How did you share mathematical conventions, alternate strategies, or help students to better articulate the ideas in their methods? How did you support diverse groups of learners, including language learners and students with disabilities? (Practice/Assess: MMSN TPE 1.1, 1.2, 2.1, 2.8, 2.9, 3.1, 4.1, 4.7, 5.6) .

5) Improvements or adaptations for the future: Based on what happened in this lesson, what changes do you think you might have to make to the next lesson? Why do you think you need to make those changes? What would you do differently if you taught this lesson again? Be sure to address specific adaptations for language learners and students with identified disabilities. Practice/Assess: MMSN TPE 1.1, 1.2, 2.1, 3.1, 4.1, 4.4, 5.6) .

6) Teaching of mathematics: How did this assignment help you to grow as a mathematics teacher? What did you feel the most confident/challenged about when preparing/teaching this lesson?

Complex Math Task Lesson Reflection Rubric

Component and Standard	Exceeds Standards	Meets Standards	Approaches Standards	Does not Meet Standards
General Reflection	Introduction is rich in detail. Rich explanation of how the lesson went (what went well, what did not go well) and why you think it went the way it did. In-depth review of how the task impacted both student engagement and student understanding. Good attention paid to how the task enhanced the lesson. 4.0 points	Introduction to task is included. Explanation of how the lesson went (what went well, what did not go well) and your thoughts on why is adequate. Review of how the task impacted the students engagement and understanding is present. Some attention is paid to how the task enhanced the lesson. 3.0 points	Introduction is minimal in detail. Explanation of how the lesson went (what went well, what did not go well) and your thoughts on why is partially complete. Review of how the task impacted the student's engagement and understanding is incomplete. Little attention is paid to how the task enhanced the lesson. 2.5 points	Introduction is lacking in detail. Explanation of how the lesson went (what went well, what did not go well) and your thoughts on why is inadequate. Review of how the task impacted the student's engagement and understanding is missing or incomplete. Little to no attention is paid to how the task enhanced the lesson. 0 points

Summary of Task	A thorough explanation of the math task is given. A vivid explanation of whether or not the task was a worthwhile mathematical task; did it allow students to investigate the math concepts that you wanted, did it have multiple entry points for all students including ELs and students with identified disabilities. (Assess MMSN 1.1., 1.2, 1.7, 2.1, 3.1) 4.0 points	An explanation of the math task is given. There is some explanation of whether or not the task was a worthwhile mathematical task; did it allow students to investigate the math concepts that you wanted, did it have multiple entry points for all students including ELs and students with identified disabilities. 3.5 points	Explanation of the math task is given, but missing details. Brief but disconnected explanation of whether or not the task was a worthwhile mathematical task; did it allow students to investigate the math concepts that you wanted, did it have multiple entry points. Does not address how the task is accessible to all students. 2.5 points	There is a lack of details in explanation of the math task. Little or no explanation of whether or not the task was a worthwhile mathematical task; did it allow students to investigate the math concepts that you wanted, did it have multiple entry points. Does not address how the task is accessible to all students. 0 points

Students' Understanding	Rich explanation of what you learned about the students' thinking, Detailed summary of what the students understood about the math concepts and what seemed to help them understand, as well as what was hard for them to understand about the concept and why you thought it was hard? Claims are supported with description of student work with clear examples across different student populations, including ELs and students with identified disabilities.(Assess MMSN 2.8, 2.9, 2.10, 5.1, 5.2, 5.6) 4.0 points	Moderate explanation of what you learned about the students' thinking. Moderate summary of what the students understood about the math concepts and what seemed to help them understand, as well as what was hard for them to understand about the concept and why you thought it was hard? Claims are supported with description of student work with examples across different student populations, including ELs and students with identified disabilities. 3.5 points	Includes minimal explanation of what you learned about the students' thinking, Summary is lacking in detail of what they understood about the math concepts and what seemed to help them understand, as well as what was hard for them to understand about the concept and why you thought it was hard? Claims are supported with minimal description of student work with few and vague examples across different student populations, including ELs and students with identified disabilities. 2.5 points	Explanation of what you learned about the students' thinking is minimal or nonexistent. Details are lacking or not included in the summary of what the students understood about the math concepts and what seemed to help them understand, as well as what was hard for them to understand about the concept and why you thought it was hard? Claims are not supported with description of student work. 0 points

Your role in facilitating mathematical understanding	Includes thoughtful and rich reflection on what you did to facilitate children's mathematical understanding and how it worked. Detailed summary of things you noticed yourself doing during the lesson to support, clarify, and extend children's thinking. Clear explanation of how you shared mathematical conventions, alternate strategies, or help students to better articulate the ideas in their methods? Included detailed review of how you supported diverse groups of learners, including ELs and students with identified disabilities.(Assess MMSN 1.1., 1.2, 1.7, 2.1, 3.1) 4.0 points	Includes reflection on what you did to facilitate children's mathematical understanding and how it worked. Summary of things you noticed yourself doing during the lesson to support, clarify, and extend children's thinking. Explanation of how you shared mathematical conventions, alternate strategies, or help students to better articulate the ideas in their methods. Included general review of how you supported diverse groups of learners, including ELs and students with identified disabilities. 3.5 points	Includes minimal reflection on what you did to facilitate children's mathematical understanding and how it worked. Brief summary of things you noticed yourself doing during the lesson to support, clarify, and extend children's thinking, but missing detail. Spotty explanation of how you shared mathematical conventions, alternate strategies, or help students to better articulate the ideas in their methods. Included minimal review of how you supported diverse groups of learners 2.5 points	Includes little or no reflection on what you did to facilitate children's mathematical understanding and how it worked. Very brief or no summary of things you noticed yourself doing during the lesson to support, clarify, and extend children's thinking. Brief or no explanation of how you shared mathematical conventions, alternate strategies, or help students to better articulate the ideas in their methods. Included little or no review of how you supported diverse groups of learners. 0 points

Improvements and adaptations	Includes a rich description of what changes you could make to improve the lesson. Detailed explanation of why you thought these changes should be implemented. Clear summary of what you would do differently if you taught this lesson again. Clearly identifies specific adaptations to better serve EL students and students with identified disabilities. (Assess MMSN 1.1., 1.2, 1.7, 2.1, 3.1, 4.1, 4.2) 4.0 points	Includes a description of some changes you could make to improve the lesson. Explanation of why you thought these changes should be implemented. General summary of what you would do differently if you taught this lesson again is included. Identifies adaptations to better serve EL students and students with identified disabilities. 3.5 points	Includes a brief description of what changes you could make to improve the lesson. Some explanation of why you thought these changes should be implemented. Minimal summary of what you would do differently if you taught this lesson again. Vaguely identifies adaptations to better serve EL students and students with identified disabilities. 2.5 points	Includes little or no description of what changes you could make to improve the lesson. Missing or minimal explanation of why you thought some of these changes should be implemented. Summary of what you would do differently if you taught this lesson again is either missing or not clear. Does not identify adaptations to better serve EL students and students with identified disabilities. 0 points
Teaching of Mathematics	Includes a rich description of how the assignment helped you to grow as a mathematics teacher. Describes in detail what you felt the most confident/challenged about when preparing/teaching this lesson. 4.0 points	Includes a description of how the assignment helped you to grow as a mathematics teacher. Describes in with some detail what you felt the most confident/challenged about when preparing/teaching this lesson. 3.5 points	Includes a brief description of how the assignment helped you to grow as a mathematics teacher. Describes what you felt the most confident/challenged about when preparing/teaching this lesson, but description lacks detail. 2.5 points	Includes little to no description of how the assignment helped you to grow as a mathematics teacher. Missing description of what you felt the most confident/challenged about when preparing/teaching this lesson. 0 points

Lesson Plan Modification

FOR THE SECTIONS BELOW ADDRESS EACH PROMPT. It is ok to repeat from earlier sections, if need be. (2 POINTS EACH, TOTAL 10 POINTS)

Specific Strategies and Adaptations for English Learners
Specific Strategies and Adaptations for Students with Identified Disabilities as outlined in IEP (Assess MMSN 1.1., 1.2, 1.7, 2.1, 3.1, 4.1, 4.2)