

C10 Lamont SKMP – Teacher Efficacy Survey (Math, Engineering & Technology)

Q1 This research study asks you to express your opinions and feelings regarding Science, Technology, Engineering, and Mathematics (STEM) instruction and instructional strategies. The findings of the study will yield vital information about the effectiveness of professional development with regard to your self-efficacy. The survey should take you between 10 to 25 minutes to complete. The results of the study may be published in an educational journal and/or presented at a professional conference.

For more information about this research you may contact: Tony Alteparmakian 661.654.3129 aalteparmakian@csub.edu. Please exit your browser if you do not wish to participate or indicate your willingness to participate by answering the following question using the drop-down menu.

Do you agree to participate in this study?

- Yes (1)
- No (2)

If Yes Is Selected, Then Skip To End of Block;
If No Is Selected, Then Skip To End of Survey

Please enter your participant number:

Grade level you are currently teaching:

- 3rd (1)
- 4th (2)
- 5th (3)
- 6th (4)
- 7th (5)
- 8th (6)

Number of years teaching at your current site:

- 1 year (1)
- 2 years (2)
- 3 - 5 years (3)
- 6 - 10 years (4)
- 11 years or more (5)

Number of years teaching overall:

- 1 year (1)
- 2 years (2)
- 3 - 5 years (3)
- 6 - 10 years (4)
- 11 years or more (5)

Please indicate the degree to which you agree or disagree with each statement below by selecting the appropriate bubble to the right of each statement.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
I know the steps necessary to teach mathematics concepts effectively. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand mathematics concepts well enough to be effective in teaching mathematics. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can use manipulatives to explain to students why mathematics works. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable teaching students by problem solving and modeling in mathematics. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable teaching procedural skills in mathematics. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable developing conceptual mathematics understanding in my students. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable facilitating group projects. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think students should learn mathematical concepts through direct instruction methods. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think students should learn mathematical concepts through student-lead investigation. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Students should be encouraged to make mistakes in mathematics. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can effectively integrate technology into my mathematics lessons. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can explain the different aspects of the engineering design process. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know how to teach engineering concepts effectively. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can assess my students' engineering design products. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can create engineering activities at the appropriate level for my students. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

About how often do you do each of the following in your mathematics instruction?

	Used seldom, if ever (1)	1 - 3 times per month (2)	1 - 2 times per week (3)	More than 2 times, or daily, per week (4)
Introduce content through formal presentations. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pose open-ended questions. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engage the whole class in discussions. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Encourage student-to-student interaction (questioning, explaining concepts). (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use questioning to help students consider alternative methods for solutions. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Encourage students to use multiple representations (e.g., numeric, graphic, geometric, etc.) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assign mathematics homework. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use mathematics journals, notebooks, or formal notetaking. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide reflections and comments on students' mathematical writing (notebooks, notetaking, journals) (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anticipate student misconceptions or expected student response before a lesson. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work on mathematics problems with multiple answers or solution methods. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use manipulatives to help explain mathematics Use manipulatives to help explain mathematics (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How confident and prepared do you currently feel about teaching each of the following topics?

	Not at all confident (1)	Somewhat confident (2)	Fairly confident (3)	Very confident (4)
Ratios and proportions (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding fractions (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adding/subtracting fractions (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multiplying fractions (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Statistics and probability (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Place Value (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estimation and rounding (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Percentages (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graphing equations (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solving one-variable equations (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graphing inequalities (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decimals (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 Thank you for your participation!