

The most important things for me this year are the following:

- 1) Act accordingly to the principle that learning is a social activity. This is new for me. I never realized it until recently.
- 2) Engage students in mathematical conversations. (A-B written conversation, 10 cent \$2 writing, etc.)
- 3) Open questions. Actually, give an answer and then make them think, elaborate, and then produce their own examples and answers.
- 4) Encourage the students to get help when they got stuck and then come back to them later to make sure they also learn.
- 5) Parallel teaching. Always keep in mind that I need to reach the most number of students, not just the few who are paying attention.
- 6) Constantly remind the students that literals represent numbers; therefore, whatever applies to numbers also applies to literals. This is an act of utilizing the students' prior knowledge to facilitate the learning of new knowledge. Give examples frequently and remind them to use the same technique to clarify when they are stuck in a quiz, test, etc. This will also build the students' strength in manipulating mathematics in a more abstract level.
- 7) Also, realize that the same mathematical expression can represent different real-world situations and also, a given real-world situation can be expressed in different mathematical expressions.
- 8) Use technology. At the same time, beware of students who do not have ready access to technology. To remedy this, I will set up student computer in the classroom, and also make use of iPad, etc. Because my goal is that the students can use iPhone and iPad to answer questions, especially short essay questions, or do other writing activities. Because they can submit their writing electronically, I will be able to assign as many on-line writing/testing activities as long as it is appropriate.
- 9) With those students who do not have ready access to technology in mind, because I will be tutoring at the Saturday school and also Tuesday evening tutoring session at the Long Tree Parkway church, I will also encourage the students to make good use of these opportunities to spend more time with technology.
- 10) Plan 3 – 5 activities per class, and plan before-hand.
- 11) One more thing I want to do: since a lot of the students like to draw on the one hand, and on the other so much emphasis is put on writing at this moment, I will actually encourage them to put small figures in their writing as they see appropriate as a tool to help them visualize, analyze, and organize the information and their thoughts. I am sure that will improve their writing tremendously. Or we teachers need to figure out the rule of proper figuring in an writing activity.
- 12) Make good use of word wall.
- 13) Treat mathematics as a language. We learn a language by building up the building blocks (words; academic mathematic vocabulary) into larger elements (phrases; mathematical formulas) by connecting them with mortar (semantics; mathematical concepts), and then into still larger elements (sentences, paragraphs and articles; mathematics representing real-world problems and solutions).
- 14) Following from 13), we need to teach them to read in mathematics, to write in mathematics, to listen in mathematics, to speak in mathematics, and to act and engage in mathematics.