How Can We Teach Thinking Strategies?

What are some general guidelines for teaching a new thinking strategy?

Guidelines for teaching a new thinking strategy include the following:

- Present word problems or situation where they have to use the operation they are learning. Context makes a difference; it helps students make sense of the situation.
- Have students explain their thinking as they solve problems and verify solutions to problems.
- Have students verbalize this thinking.
- Illustrate that thinking concretely by using manipulatives or representations.
- Create situations where inefficient thinking does not work well.
- Discuss that new thinking a few minutes every day for about two weeks. Provide conceptual experiences for an extended time period to give students more time to learn and understand the new thinking.
- After that, compare the new thinking with other ways of thinking and discuss when each could be used efficiently.
- Extend the new thinking to applications with larger numbers.
- Discontinue the use of manipulatives (and touch math) as you begin to learn the harder facts and use larger numbers.

Provide conceptual reviews throughout the year. Continue to discuss that same thinking in lots of new situations with larger numbers and in various problems throughout the school year.