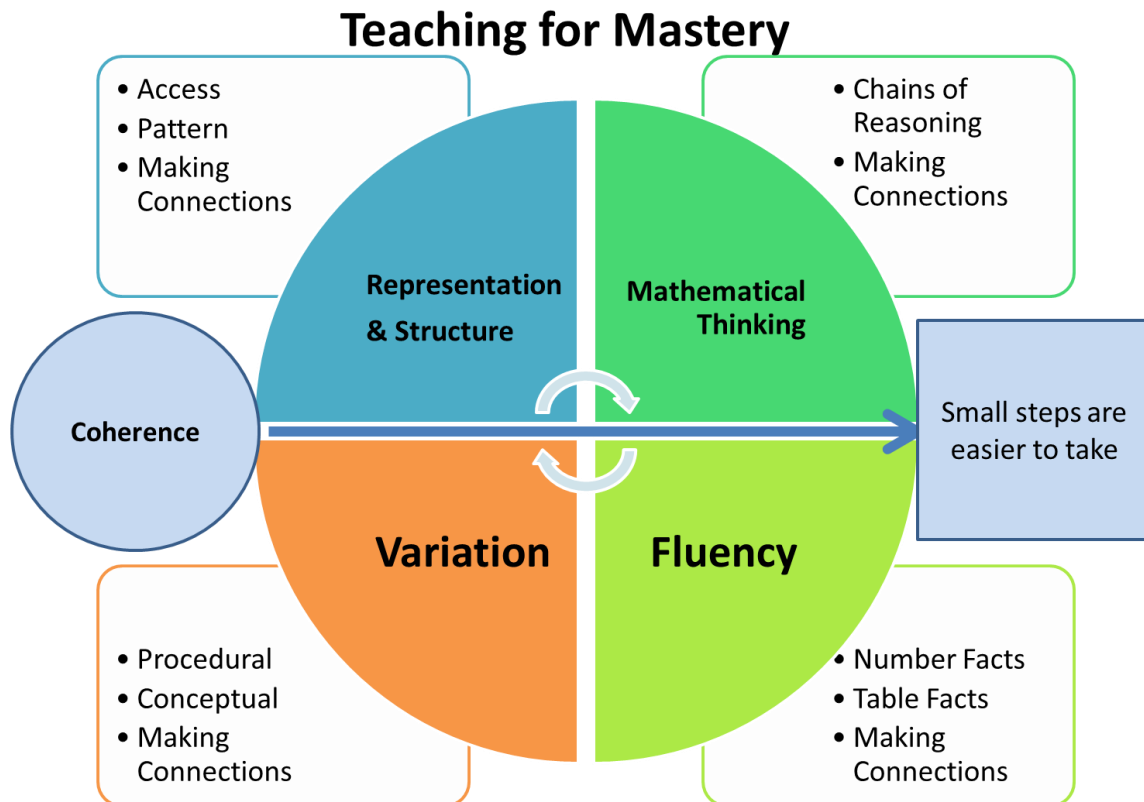


Teaching for Mastery: Mathematical Thinking



Key Messages

1. Mathematical thinking is central to deep and sustainable learning of mathematics.
2. Taught ideas that are understood deeply are not just 'received' passively but worked on by the student. They need to be thought about, reasoned with and discussed.
3. Mathematical thinking involves
 - a. looking for pattern in order to discern structure
 - b. looking for relationships and connecting ideas
 - c. reasoning logically, explaining, conjecturing and proving.