Facilitating Transfer and Problems solving in Mathematics

Theories and research related to transfer and problems solving yields a number of implications of educational practice. These implications are listed below. how would you consider each of these points when developing a mathematics curriculum?

- 1. Students need to learn information meaningfully and thoroughly.
- 2. Students should learn problems-solving strategies at a meaningful level.
- 3. Students must have a mental set for transfer.
- 4. Some prerequisite skills should be practiced until they are learned to the point of automaticity.
- 5. Numerous and varied examples and opportunities for practicing transfer and problems solving should be provided.

- 6. Students should have experience identifying problems for themselves.
- 7. To minimize negative transfer, differences between two ideas should be emphasized.

8. Problem-solving skills are sometimes better learned through a discovery approach.

9. Teaching general learning and problem-solving skills may be helpful.

10. Students should learn strategies for defining ill-defined problems.

11. Students' early attempts to solve difficult problems should be scaffolded.

12. The development of effective problem-solving strategies can often be facilitated through.

13. Classroom evaluation practices should include measures of transfer and problem solving.