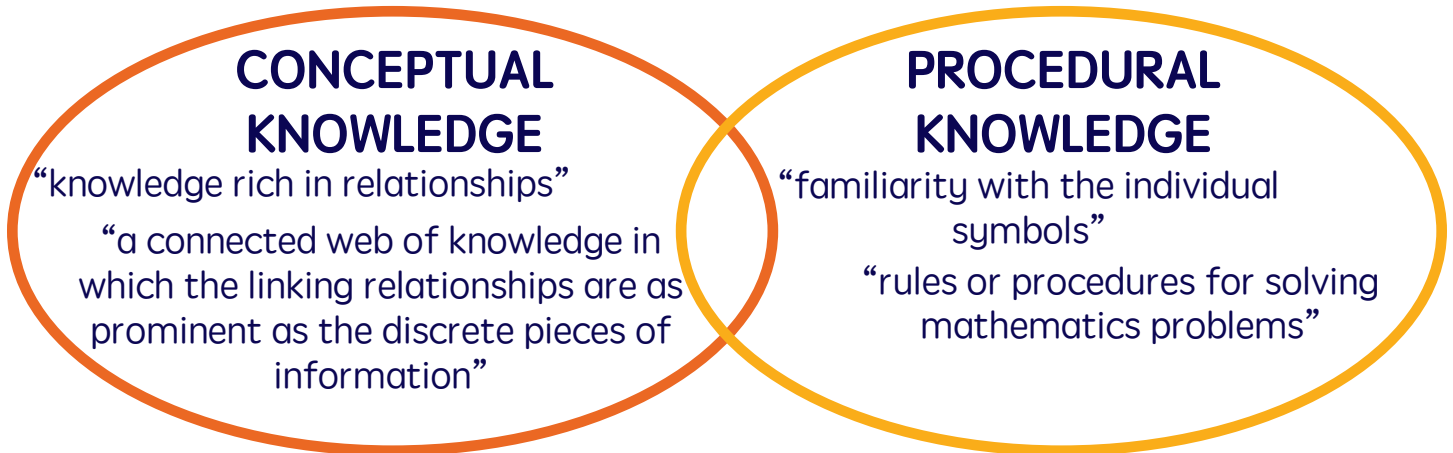
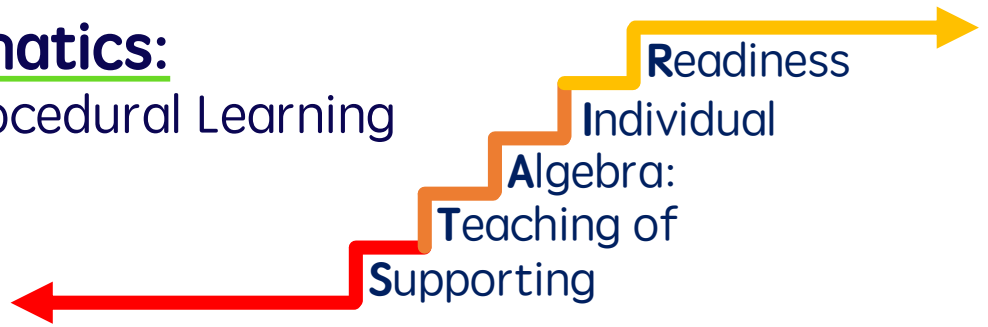


Ideas in Mathematics:

Conceptual and Procedural Learning



Conceptual knowledge often supports and leads to procedural knowledge.

→

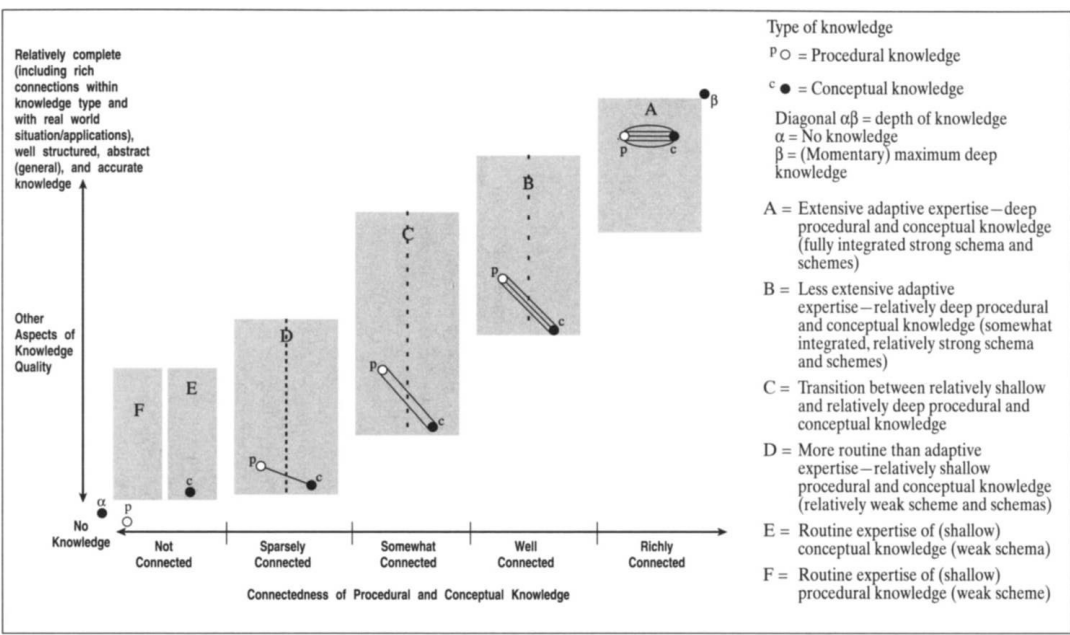
Children's conceptual knowledge can help them invent and understand procedures.

(Rittle-Johnson et al., 2015, p. 588)

Evidence indicates the relations between conceptual and procedural knowledge are **bidirectional**, with improvements in procedural knowledge often supporting improvements in conceptual knowledge and vice versa.

↔

(Rittle-Johnson et al., 2015, p. 594)



Baroody, Feil, & Johnson (2007)

Competence in a domain requires knowledge of both concepts and procedures.

(Rittle-Johnson et al., 2001, p. 359)