

MISCONCEPTION

Inquiry-based instruction should be the primary tactic used to teach math. Explicit instruction only is beneficial for struggling learners. Explicit instruction is an instructional tactic where students are provided with correct answers and this only promotes rote learning.

TRUTH

Explicit instruction offers value through sequencing of tasks in increments of difficulty, fluency building that promotes effective practice, and scaffolded opportunities for students to combine learned skills with new knowledge. Explicit instruction facilitates creativity and is effective for all learners^a.

What are the common misconceptions about inquiry-based instruction?

Inquiry-based approaches increase math achievement

Inquiry-based approaches increase students' feelings about math

Students are more likely to remember information they have "discovered"

Students learn better when they are curious and interested in the problem

Discovery and application are the most useful tactics for teaching math

HOW DOES EXPLICIT INSTRUCTION PROMOTE CREATIVITY?



Explicit instruction provides sequences of instruction tied to students' needs to promote mastery of the fundamental skill and provide opportunities to expand new understandings.



The process of mastering fundamental skills and demonstrating new knowledge is identical to that followed by athletes, musicians, artists, and experts in all fields.

^aAlfieri et al. (2011); Doabler et al. (2015); Heijltjes et al. (2014); Morgan et al. (2015); Stockard et al. (2018)

