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**Algebraic generalization strategies used by Kuwaiti pre-service teachers.**

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Summary: This study reports on the algebraic generalization strategies used by elementary and middle/high school pre-service mathematics teachers in Kuwait. They were presented with 9 tasks that involved linear, exponential, and quadratic situations. The results showed that these pre-service teachers had difficulty in generalizing algebraic rules in all 3 types of tasks. The most difficult problems were those involving exponents; they seemed to confuse exponential growth with the multiplication of  $n$ . Although they used several strategies such as explicit, recursive, and chunking, they tended to rely on explicit reasoning. They saw the explicit rule as a quick and easy rule to be used. In order to improve students' understanding of algebraic reasoning, we must improve the understating of generalization. Teachers' programs should put more emphasis on the type of content that teachers need to learn rather than on how much mathematics credits teachers need.

*Classification:* H29 H39 C39

*Keywords:* algebraic reasoning; generalization; teacher education; international study

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