Specialized knowledge on statistical graphs by future teachers of early childhood education

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Abstract

This study aims to assess specialized knowledge on statistical graphs by 102 early childhood education future teachers from Chile. A qualitative, descriptive level methodology is employed, based on content analysis. In particular, four items that assess aspects of this subdomain of the MKT (Mathematical Knowledge for Teaching) model are reported. The items relate to expressing deep and specific knowledge and to representing ideas accurately on statistical graphs. The results show that teachers commit errors when defining statistical graphs, when identifying concepts linked to bar graphs, and when making calculations and predictions based on the information represented on graphs. It is concluded that future teachers of early childhood education lack specialized knowledge on statistical graphs as defined by Chilean standard guidelines for early childhood education degrees. © 2021

Author keywords

conocimiento; early childhood education; educación infantil; especializado; futuras maestras; future teachers; gráficos estadísticos; knowledge; specialized; statistical graphs