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**The visual side to numeracy: students' sensemaking with graphics.**

Aust. Prim. Math. Classr. 14, No. 1, 16-20 (2009).

Summary: The 21st century has placed increasing demand on individuals' proficiency with a wide array of visual representations, that is graphics. Hence, proficiency with visual tasks needs to be embedded across the curriculum. In mathematics, various graphics (e.g., maps, charts, number lines, graphs) are used as means of communication of mathematical ideas and also as tools for thinking about these ideas. Thus, to be numerate in contemporary society, all individuals need to make sense of the graphical aspects of mathematics. Although an understanding of representations is critical for numeracy, proficiency with graphics in mathematics is often overlooked. This article highlights the six key types of graphics used in mathematics and provides some suggestions for developing students' ability to interpret each of these types of graphics. As a background to the discussion on types of graphics, two roles of graphics are first discussed. (Contains 8 figures.) (ERIC)

*Classification:* D30

*Keywords:* numeracy; mathematics; spatial ability; maps; topography; graphical representations; goals of mathematics education

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