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Spatial cognition: key to STEM success.

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Summary: The capacity to perceive the visual images accurately, construct mental representations and imaginary of visual information, understand and manipulate the spatial relations among objects have been considered as spatial ability, a powerful indicator of personal quality and individual differences. Past and present studies reveal the significant correlations between spatial ability and success in science, technology, engineering and mathematics courses and to some extent, gender. Some researchers suggest that spatial ability is malleable and can be improved with interventions, enrichment and training activities. There is currently a renewed interest in visual and spatial reasoning skills to identify the talented students and encourage them to pursue the science, technology, engineering and mathematics (STEM) related careers and function well in techno-centric world.

Classification: C40 C30

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