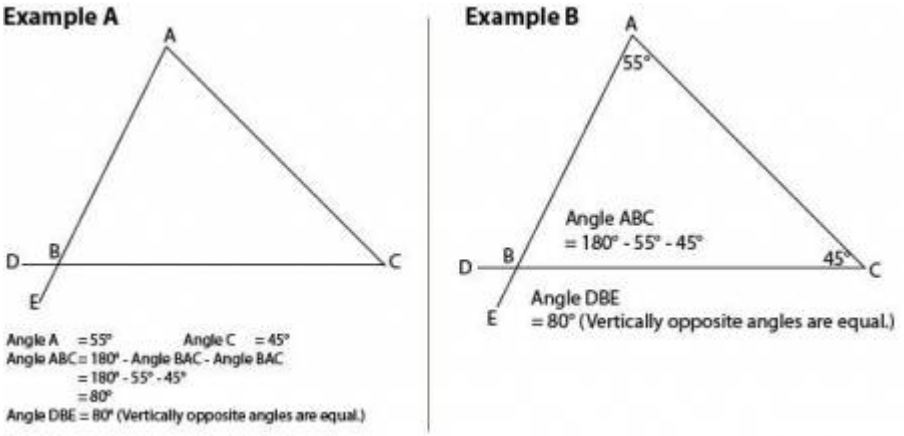
The Spatial Contiguity Principle

Theory

The spatial contiguity principle suggests that related information sources should be **spatially integrated** in order to reduce attention-splitting and facilitate learning.

Practice

An example of a solved mathematical problem taking into consideration and ignoring the spatial contiguity principle is presented in image on the right. Example A shows separated text and graph (two information sources), whereas example B shows same two information sources, but this time spatially integrated. For another example see work of Florax and Ploetzner[1].



Research status

Experiments have confirmed importance of this principle[2], yet similar results were sometimes obtained using not necessarily spatial contiguity, but segmenting text and labeling the image.[3]

1) Florax, Mareike, and Rolf Ploetzner. What contributes to the split-attention effect? The role of text segmentation, picture labelling, and spatial proximity. Learning and Instruction 20, no. 3: 216-224. June 2010.

2) Chandler, P. and Sweller, J. Cognitive load theory and the format of instruction. Cognition and Instruction, 8(4), 293-332. 1991.

3) spatial_contiguity_principle