

Abstract Submitted
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Teaching By Analogy KENRIC DAVIES, Sherman ISD — Activation of prior knowledge has become an important tool used by educators to help students learn difficult concepts. In many cases, the tool that is used to activate this knowledge and to aid in the connection making that follows is the analogy. Analogies are used to show the similarities between what students already know and a new, typically more rigorous, concept. After the similarities have been mapped to the new concept, differences are then used to launch a deeper understanding of the new information. This process is known by many names including Analogical Scaffolding (Podolefsky & Finkelstein), Teaching with Analogy (Glynn), and Working with Analogies (Nashon). Scientists use a similar method in order to understand new information gained on the frontiers of science. Case studies on Johannes Kepler's understanding of light and gravity and the progression of electrostatics fall under a process known as Structure Mapping Theory (Gentner). Teaching with analogies is not only helping students learn new content within science, it is also teaching students how science is conducted and advanced.

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