

Conceptual Change Theories as Frameworks for Chemistry Education Research

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There is a significant body of science education literature which deals with the process of conceptual change. Despite this fact, research into students' conceptions of chemistry is often published without an explicit recognition of a theoretical framework. This may, in part, be due to difficulties associated with 'decoding' the language of the education literature, which can make choosing an appropriate theoretical framework difficult. This presentation will begin with a brief description of some theories of conceptual change. This will be followed by a discussion of how they can be used to guide the design of qualitative research into students' conceptions of chemistry, and of their use in understanding research findings. Research findings concerning student misconceptions are most useful if they provide insight into the origins of the misconception, as this allows an instructor to consider how best to minimise the chances of future students developing the misconception. The final part of this presentation will concern the use of theories of conceptual change to aid in this process.

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