

**THE EVOLVING NATURE OF CHEMICAL EDUCATION:  
CURRENT AND FUTURE POTENTIAL**

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**Abstract**

An inspection of historical trends suggests several key ideas that have developed since chemistry began as a formal subject of study.

- Chemistry is the central science.
- Understanding chemistry has become necessary for an increasing cohort of citizens.
- The role of the laboratory in learning chemistry must be (re)defined.
- Educational psychologists and cognitive scientists have important things to tell teaching chemists.
- Digital technology is effective in helping students learn and teachers teach.

If those lessons are to be believed, the evolving nature of chemical education can be described. Here, we attempt to use these lessons to describe a possible future for the evolution of the chemical education enterprise.