
Previously, the authors proposed the concept of “science capital” a specific form of high value social and cultural capital. In this study, the authors define science capital and report their findings from surveying 3,658 students. Science capital encompasses scientific literacy, science appreciation, science media consumption, out-of-school science learning, knowing people with jobs related to science, and talking to others about science. Students with high science capital are more likely to be male, Asian, and from socially advantaged backgrounds. Those with low science capital tend to be girls from less socially disadvantaged backgrounds. Importantly, students with low science capital reported that they were less likely to want to work in a science-related job and less likely to continue studying science. Understanding science capital is a way to understand how inequalities are reproduced in science education and careers preparation. Moreover, understanding science capital is an important step in sharing privileged information and activities more equitably.


Eighty-four photo-narratives that illuminate supportive and inhibiting factors related to teaching gifted students in regular classrooms were collected from 14 chemistry teachers who participated in a professional development course “Best practices for gifted and talented students" in Israel. The photo-narratives were analyzed based on a constructive/interpretive qualitative framework. Results indicate that the top five factors that support the teaching of gifted students in a classroom with mixed-ability students are opportunities for: inquiry laboratories, teacher interactions with the gifted students, incorporation of technology, exposure to high quality teacher knowledge, and science enrichment programs.


The researcher considered the influence of Paul F. Brandwein, a scientist, teacher, and author, on his gifted students, many of whom pursued careers in the sciences. The researcher analyzed survey responses from 25 of Brandwein’s students, looking for evidence of his hypothesis that young people who later become scientists often share three characteristics: a Genetic factor (general intelligence, numerical ability, and verbal ability), a Predisposing Factor (persistence, ability to face failure, and questioning current explanations) and an Activating Factor (opportunities to conduct authentic science experiments under the mentorship of a skilled teacher or other mentor). The researcher noted that most respondents gave little credence to the ideas of a Genetic Factor, but, with few exceptions noted that characteristics or experiences that could be classified under the Predisposing and Activating Factors fit with their experiences as they entered into careers in the sciences. Specifically, all respondents noted the importance of Brandwein, and other mentors in the sciences.
More References


