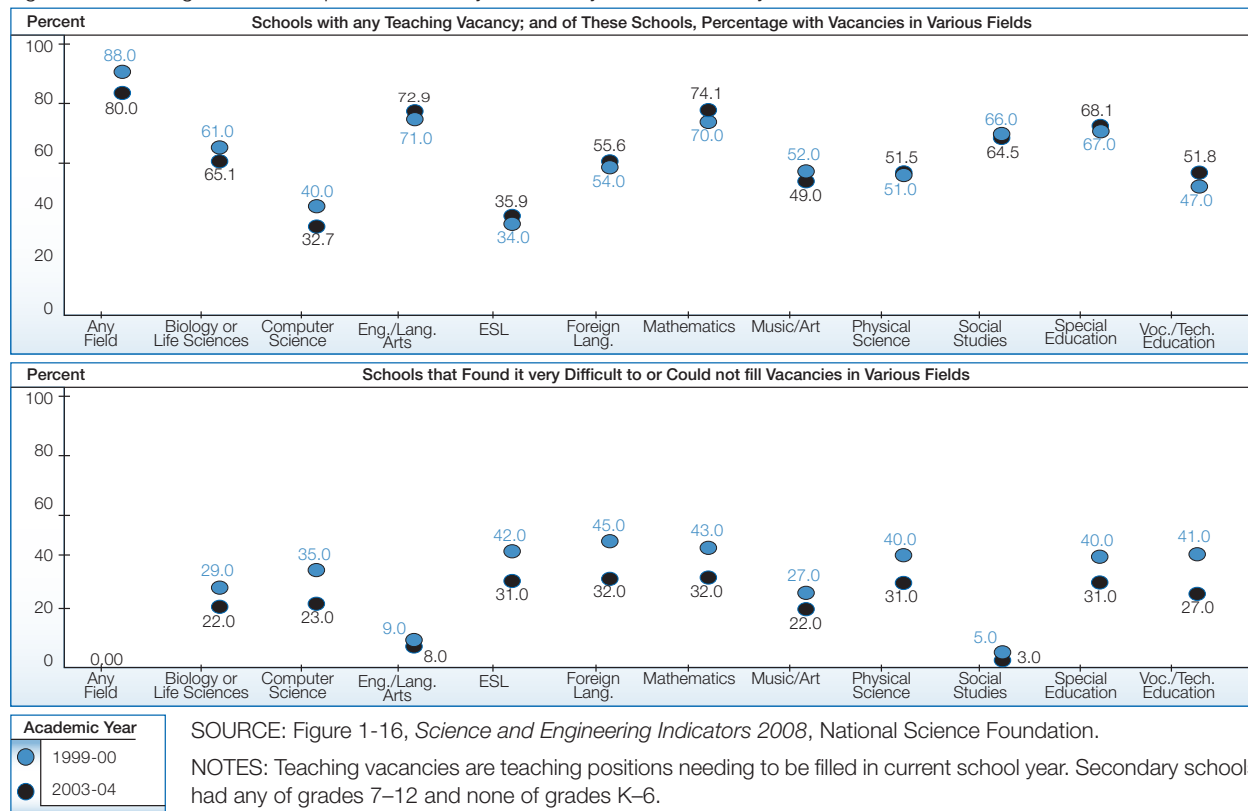


In academic year 2003-04, about 59% of the public secondary schools in the United States reported vacancies in mathematics teaching positions, and of these nearly one-third said that they found it “very difficult to” or “could not” fill those vacancies.

Figure 14. Teaching vacancies at public secondary schools, by field: Academic years 1999–2000 and 2003–04



Why is this indicator important?

- The teaching workforce plays a critical role in preparing graduates for careers in an increasingly technological labor market.
- Teacher vacancies in S&E fields may indicate that students will not receive adequate motivation and training to join the S&E workforce later on.

Key Observations

- About 80% of public secondary schools reported teaching vacancies (i.e., teaching positions needing to be filled) in one or more fields in academic year 2003.
 - Among these schools, 74% had vacant positions in mathematics and 52–56% had vacant positions in biology/life sciences and physical sciences.
 - About one-third of public secondary schools with vacancies in mathematics or physical sciences reported great difficulty in finding teachers to fill openings in these fields, whereas 22% of schools reported that this was the case in biology/life sciences.

Related Discussion

- Current research suggests that in recent years hiring difficulty was primarily caused by large numbers of teachers leaving the profession before regular retirement age (*SEI 2008* Chapter 1).
- Teacher shortages occurred more frequently in certain states where the population grew fast because of immigration and/or high rates of childbirth (e.g., CA, TX, and FL) (in certain fields, and in high-poverty areas) (*SEI 2008* Chapter 1).