

**Table 3.2:** Suggestions for Big Ideas

Subject	Big idea
English language arts	The “hero’s journey” (Campbell, 1949/2004) as a structure for understanding myths and legends.
Social studies (geography)	Patterns of human development are influenced by, and in turn influence, physical features of the environment.
Social studies (history)	All historical sources are products of their time, but understanding the circumstances of their creation helps us resolve conflicts of evidence.
Mathematics	Fractions, decimals, percentages, and ratios are all ways of expressing numbers, and every real number can be represented as a point on a number line.
Science	All matter is made of very small particles.

## Cautions

### Not All Useful Learning Intentions Will Be Big Ideas

Even with a clear focus on big ideas, there is always a need for some “mopping up” of individual pieces of content that don’t fit neatly anywhere else. For example, it is useful for students to know how to read Roman numerals, but understanding Roman numerals is not a big idea in the sense we have described it here. Moreover, the Roman numeral system is highly idiosyncratic, using bases of both 5 and 10, so learning about the Roman numeral system doesn’t help you do anything apart from using Roman numerals; the topic of Roman numerals is probably best treated as a “one-off.”

In our view, it is generally possible, over a period of several years, to organize the curriculum so that at least half of the content is in the form of big ideas. This may seem modest, but the clarity brought to the curriculum, for both the teachers and students, is a huge advantage. If you can get two-thirds, you’re doing well, not least because state standards were never designed to be coherent, so imposing some order on them is challenging.

### Learning Progressions Need Both an Empirical and a Theoretical Basis

The fact that students happen to learn something in a particular sequence does not mean that the sequence is an appropriate learning progression. After all, the particular learning sequence might just be an accident of the particular way that students had been taught. To be useful as a learning progression, there has to be some underlying rationale that students are likely to follow in using this particular sequence in advancing their work. However, as every teacher knows, by itself, a compelling logical rationale that students should learn something in a particular sequence does not mean that they will do so. We