

FAQ: The K–8 Sequence Answers

New to Core Knowledge

I am hoping to transform an existing school that presently uses a different approach into a Core Knowledge school. What should I do?

When working with an existing school, the first step is to gain the support of the school leadership and staff. You can build buy-in by providing them with information about [the Core Knowledge approach](#) and sharing research documenting its effectiveness as well as [success stories in other schools](#).

Learn more about [getting started](#) with Core Knowledge.

Can we effectively teach students who have not used Core Knowledge in their earlier grades?

Ideally, students will experience the topics in the *Core Knowledge Sequence* in a sequential, grade by grade manner since knowledge builds cumulatively (i.e., what students learn at each new grade level builds upon the knowledge learned in earlier grade levels).

However, schools just beginning implementation of Core Knowledge must start somewhere. Some schools choose to start implementation in the earliest grade level(s), adding additional grades as these students move up to other grade levels.

Other schools choose to begin a school-wide implementation across all grade levels simultaneously. Schools have been successful implementing in this way by explicitly recognizing that students in the upper grade levels have not benefited from a sequential, grade by grade introduction to the topics of the *Sequence*; background knowledge that would normally be taken for granted at a given grade level must be explicitly taught. These schools carefully craft their curriculum plans to incorporate time for "back-teaching" earlier topics, building background knowledge that students would normally have already received. You can create a list of prior topics by reviewing those listed for the earlier grades in the *Sequence*. Another option is to assign summer reading (with parents) from the [grader series books](#). Also, if you have new students transferring into your Core Knowledge school, they should jump right in—you can fill missing background knowledge as you would with any new student.

Teaching Core Knowledge

How do I teach Core Knowledge?

Check the [Implementation section](#) for guidance and resources for bringing Core Knowledge into your classroom or school. You can also [browse our Curriculum](#) for many comprehensive, content-rich materials available as free downloads. Our curriculum directly supports the teaching of topics specified in [the Core Knowledge Sequence](#).

Visit the [Core Knowledge Store](#) for other resources to support putting Core Knowledge into practice.

What are your recommendations for a reading program?

Reading requires two abilities—the ability to turn print into language (decoding) and the ability to understand what the language says. The Core Knowledge Foundation has developed [Core Knowledge Language Arts](#) (CKLA) to ensure that students develop both abilities.

For Preschool to Grade 3, all CKLA materials are available for free download except for certain trade book titles. For Grades 4 and 5, several CKLA units are available for free download while others are not due to copyright restrictions.

Does Core Knowledge have a position on how to teach reading?

Consistent with the findings of the National Reading Panel, whose [reports](#) are available online, Core Knowledge strongly supports systematic phonics instruction as the superior way to teach decoding skills. For more information on reading and the superiority of phonics approaches, consult any of the following books:

- Susan Hall and Louisa Moats, *Straight Talk About Reading*
- Jean Chall, *Learning to Read: The Great Debate*
- Marilyn Jager Adams, *Beginning to Read: Thinking and Learning About Print*
- Diane McGuinness, *Why Our Children Can't Read*
- Catherine E. Snow, M. Susan Burns, and Peg Griffin, *Preventing Reading Difficulties in Young Children*

As far as decoding is concerned, CKF is firmly on the phonics side, not the whole language side.

However, saying that phonics instruction is the best way to teach decoding is not the same as saying that phonics alone is enough to ensure children become good readers. There is another element to reading comprehension, besides decoding, and that is language comprehension, or oral language. Students need to be able to not only decode words and sentences, but also to understand what those words and sentences mean. This means they need to know lots of words and ideas. They need to know about key subjects in history, science, and the arts. They need to have cultural literacy. This is why the *Core Knowledge Sequence* contains so many different subjects of study—all these things are listed because we believe children who are exposed to these topics will have the background knowledge and language capabilities necessary to understand the words they encounter while reading.

The key thing to remember is that reading requires not only decoding skills (best taught by phonics) but also broad background knowledge and vocabulary (best taught through a rich curriculum like Core Knowledge and frequent reading aloud). To learn more about these two key components of reading, consider studying the so-called [“simple view of reading.”](#)

An ideal reading program will include good phonics instruction (followed by fluency work) combined with frequent reading aloud to expose children to new words and key subjects like the subjects listed in the *Core Knowledge Sequence*. Moreover, the reading aloud will include not only fictional stories but also generous amounts of nonfiction—because a read-aloud on George Washington or insects introduces student to different words and ideas than a story about Snow White.

Although a growing number of reading programs do a good job teaching phonics and skills, very few include the number or kind of read-alouds children need to develop the knowledge stores sufficient to be good readers. That's why the Foundation has developed [Core Knowledge Language Arts](#). This reading program combines optimal phonics-based decoding instruction with frequent teacher read-alouds—twice a day, 150 days a year, with the read-alouds organized into domains of study.

As far as classroom work is concerned, make sure your school is addressing both sides of reading. It should be teaching decoding using systematic phonics, followed by lots of practice to build fluency. And it should feature frequent reading aloud (followed or punctuated by discussion, of course) to children in the early grades. Research has shown that children's reading comprehension abilities do not catch up to their listening comprehension skills until about seventh grade. Therefore, it makes sense to keep reading aloud right through the elementary years, even when students have learned the basic decoding skills.

What are your recommendations for a math program?

The math guidelines in the *Core Knowledge Sequence* are cumulative goals that describe competencies children should achieve by the end of each grade level, but do not articulate the incremental development or regular practice and review required to achieve those competencies.

As distinguished scientists in math education (including Professors Wayne Bishop, David Geary, Robert Siegler, and others consulted by the Core Knowledge Foundation) have acknowledged, math mastery requires regular guided opportunities for practice and review to ensure that over time, basic procedures become automatic. Skills and practices acquired early in a child's education should be revisited consistently to fix them in memory and make them second nature. When this principle is followed, the child's mind is freed to focus on the structure of ever more difficult and interesting problems. Moreover, this excitement of problem solving and understanding is enhanced when children are given opportunities to approach similar kinds of problems in different ways. A variety of approaches to, for example, calculating the area of a surface, will help sustain interest and give children a deeper understanding of underlying concepts.

Schools are encouraged to use a math program that follows these basic principles and avoids distractions (for example, literature-based math or other spurious interdisciplinary connections). While it is desirable to pique a child's interest through math problems with real-world applications, it is important that such problems be translated to mathematical form in order to be readily solved.

Core Knowledge schools are encouraged to use a math program that is focused, effective, and known to work well. Individual teachers are discouraged from skipping around in a math textbook, since inconsistency among classes at a grade level makes it impossible for teachers in later grades to know what their students have been taught in earlier ones. Whatever program a school chooses, it's important that teachers agree on clear and specific goals, such as those in the *Sequence*, and then try to make sure that all students achieve those goals.

Math programs that follow sound cognitive principles and therefore lead to greater student mastery are: *Singapore Math* (distributed by Marshall Cavendish) and *Saxon Math* (Saxon Math / Harcourt Achieve).

Can Core Knowledge be adapted to meet the needs of English language learners?

Meeting the needs of English language learners presents a special challenge, as teachers must ensure that language instruction coincides with the content being taught in the classroom.

Since we believe in equity and excellence for all children, we expect that teachers will use additional strategies to support English language learners.

Content can always be modified to make it understandable for all children. The *Core Knowledge Sequence* allows English language learners to build a foundation for understanding rich content. To make this possible, teachers should select strategies and adapt them to meet the needs of their school's ELL population.

Effective strategies might include:

- Introducing topics
- Frontloading of information
- Taking picture walks
- Concept building
- Posting labeled visuals
- Highlighting selectively
- Brainstorming
- Using visuals to develop vocabulary

When working with text, effective strategies might include:

- Paraphrasing
- Using visual enhancement
- Using chants
- Using Multi-media presentations (PowerPoint, films, filmstrips, etc.)
- Using dramatization
- Conducting reader's theater
- Reducing non-essential text

When addressing literacy development and assessments, effective strategies might include:

- Using graphic organizers
- Using cloze paragraphs (cloze paragraphs are similar to fill-in-the-blank exercises.)
- Conducting cooperative learning activities
- Using graphic depictions
- Conducting shared writing
- Administering pictorial tests
- Using frame writing

Can Core Knowledge be adapted to meet the needs of gifted/honors students?

In the interest of equity and excellence, we believe that gifted children should learn the same content as other children in classrooms implementing Core Knowledge. We expect that children identified as "gifted and talented" will be given time to explore concepts in greater depth to extend their learning.

Several resources related to teaching gifted children include:

- *Teaching Gifted Kids in the Regular Classroom* by Susan Winebrenner. (ISBN: 1-57542-089-9)
- National Association for Gifted Children (www.nagc.org)
- State Departments of Education (these often have resources, guidelines, and strategies that can be adapted to the Core Knowledge curriculum).

Why isn't there a separate section in the *Core Knowledge Sequence* for Foreign Languages?

The purpose of the *Core Knowledge Sequence* is to build children's background knowledge so that they have a large enough vocabulary and a broad enough cultural background to comprehend what they read. Understanding the world around us requires a broad knowledge of culture, including historical, literary, and scientific references. Building this background is the particular focus of Core Knowledge, but we encourage schools to include other areas of study. Foreign language study, in particular, can be very valuable and starting it early has been proven to be advantageous. In fact, many Core Knowledge schools teach second languages to elementary aged children. We have not, however, added a second language sequence because, among other things, there would have to be many sequences. The preference of which languages to offer varies from place to place and school to school. While we encourage schools to add elements like foreign languages, we also encourage them not to drop elements from the *Sequence*. The topics in the *Sequence* have been carefully chosen to ensure educational equity. We want all students, advantaged and disadvantaged alike, to share in the common knowledge that can lead to success.

How do you use Core Knowledge in a multi-age setting?

The *Core Knowledge Sequence* contains content guidelines that are carefully sequenced from one grade to the next to help students build a very solid, cumulative body of knowledge over time. The topics are specific to ensure that teachers and parents have a clear understanding of what should be taught. Topics are introduced in the early grades and revisited in the intermediate grades to allow for more in-depth instruction and to utilize the background knowledge begun in the primary grades.

Using the *Core Knowledge Sequence* in a multi-age classroom requires a lot more work on the part of the teacher. The goal is to keep the content grade-specific to avoid gaps and repetitions. This either requires small group sessions within the classroom or regrouping students for content instruction, with either other classrooms on the same grade levels or across grade levels when they teach the same content (American Revolution in first and fourth grades).

Although there are many difficulties associated with teaching Core Knowledge in a multi-age setting, a few schools have accomplished this well. Please let us know if you would like contact information for a school that implements Core Knowledge in a multi-age setting so that you may contact them directly.

What is the role of the Core Knowledge Coordinator in Core Knowledge schools?

The main objective of the Core Knowledge Coordinator is to assist the principal with the implementation of Core Knowledge on site.

A Core Knowledge Coordinator is a classroom teacher who has the following attributes:

- A strong understanding of Core Knowledge and the Core Knowledge Sequence
- A positive attitude, enthusiasm, and belief in Core Knowledge
- Effective teaching strategies
- A background or experience in curriculum development
- A strong knowledge of state and local requirements
- A strong verbal and written skills

The Core Knowledge Coordinator will help the administrator with some of the following duties (as determined by the administrator and Coordinator together):

- assisting grade levels in implementation of the Core Knowledge Sequence
- assisting grade levels in the development of units
- providing assistance to promote ongoing improvements
- providing assistance to increase parental involvement and communication
- providing assistance and training for new teachers to sustain implementation
- serving as a liaison between the Core Knowledge Foundation, CSRD representative, and the school
- providing support for the staff for their efforts
- attending all related meetings and in-services

Check for upcoming [Core Knowledge Coordinator and Leadership Institutes](#).

Finding Grant Support

Becoming a Core Knowledge School will cost us money. Where can we go to find grant support?

As a nonprofit organization ourselves, the Core Knowledge Foundation does not have the financial resources to offer grants to schools wishing to implement Core Knowledge. We attempt to support Core Knowledge implementation by offering our publications and professional development services by as close to our actual costs as possible. Public schools should explore the availability of federal funds for Core Knowledge implementation through the Race to the Top Funds and/or Comprehensive School Reform Demonstration grant funds. You may also find local or regional philanthropic organizations willing to assist your school in getting started with Core Knowledge implementation.