



KinderTEK (KTEK) is a research-based instructional program aligned with Common Core State Standards for kindergarten mathematics and designed based on robust instructional design principles. Delivered through an iPad app, KTEK helps students develop, maintain, and become fluent in critical early math skills within a fun, engaging environment.

KTEK was developed by the Center on Teaching and Learning at the University of Oregon (respected for its curriculum development and educational research) and Concentric Sky (known for ideas into applications that make sense) through an iterative design process including multiple cycles of design, development, testing and revision. With funding from IES, it was tested, revised, and tested again with real students, in real classrooms, with real teachers.

With a second round of funding from OSEP, enhancements and customization options are being added to the program every day. These maximize student learning and give parents and educators flexibility as they implement this powerful tool. Implementation resources are also continually being developed to give parents and educators more confidence as they choose the KTEK model that is right for them. These resources will also help educators and parents successfully implement the program. The KTEK iPad app, embedded reporting tools, web-based reporting and student management system represent a strong system of support for students learning early mathematics.

Instructional Design Principles

KTEK incorporates elements of effective instruction, including:

- systematic, focused instruction
- modeling and scaffolding
- deliberate practice opportunities
- timely academic feedback
- embedded formative assessment

When students work in *sequenced* mode, each activity begins with a pretest to determine each student's individual learning needs. Then students are guided through a set of instructional phases intended to model, support, and scaffold student learning. KTEK includes flexible, internal progress monitoring systems that ensure a student demonstrates mastery in each phase of learning before moving on to more independent and challenging tasks. KTEK's individualized educational system provides instruction and targeted practice shown to support deep and lasting learning. *Exploration* and *directed* modes provide alternate means of using KTEK to support students' mathematics learning.

Through detailed, exportable reports at an individual and group level, the program helps educators and parents understand their students' strengths and weaknesses and adjust KTEK instruction and learning environment to fit student needs. Teachers may also wish to adjust their own instruction based on KTEK data.

Common Core – Kindergarten Mathematics Alignment

Counting and Cardinality (K.CC)

- Know number names and the count sequence (K.CC.A)
- Count to tell the number of objects (K.CC.B)
- Compare numbers (K.CC.C)

K Operations and Algebraic Thinking (K.OA)

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from (K.OA.A)

K Number and Operations in Base Ten (K.NBT)

- Work with numbers 11-19 to gain foundations for place value (K.NBT.A)

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For more information about KinderTEK, please visit <http://www.kindertek.com>.