Enhancing Education Through Technology

Grant Overview:

Enhancing Education Through Technology (Ed-Tech), also known as Title IID, is an initiative that supports the improvement of academic achievement with the integration, innovation, and use of technology, targeted at one or more schools in high-need, poverty-line communities. The manner in which this type of technological promotion is to be achieved is by assuring computer literacy to each student by the end of their eight-grade term. Additionally, teachers must integrate the use of technology into their class lesson plans and curriculum. For this reason, Ed-Tech grant money may be used to train teachers, staff and all educational personnel in the use of technology, multimedia, Internet, computer programs, etc.

Ed-Tech grants are given to state educational agencies (SEAs) by the U.S. Department of Education. The full grant application can be obtained at <u>http://www.ed.gov/programs/edtech/applicant.html.</u>

It is expected that the desired outcomes of the Ed-Tech grant will be achieved by addressing three overarching grant goals:

Enhancing Education Through Technology Grant Desired Outcomes	Expected to be Achieved Through
Infrastructure that provides wide-spread and remote access so students can use technology even in geographically isolated regions.	Partnerships and initiatives for acquiring, building, developing, connecting, implementing, improving, maintaining, and supporting technology solutions
Academic achievement that aligns with state standards, as well as computer literacy in students by the end of eighth grade.	Professional development in academic areas such as Reading, Mathematics, Language Arts, Social Studies, Science, as well as ESL /ELL Integration of technology with class lessons and curriculum Rigorous evaluation and monitoring of student progress, especially through the use of technology
Promote family involvement in education, improve computer literacy in parents and families, and improve communication among schools, students, and parents.	Use of technology, partnerships and initiatives to reach parents and families, and to connect them to students and schools.







How *Kurzweil 3000* Aligns with and Supports the *Enhancing Education Through Technology* Grant Objectives

The Ed-Tech grant has an extensive list of goals that can be categorized into two primary objectives: improvements in the academic performance, as well as improvements in access to technology by students, teachers, schools and families.

Kurzweil 3000, in conjunction with a technology acquisition program and along with school leadership and partnerships, can successfully address the Ed-Tech objectives.

Following the Overview is a list of key components that when implemented would enable schools and their partners to achieve the desired outcomes of the grant. Because the main objectives relate to academic improvement, the key components cited are literacy centric, and are derived from recent publications by literacy experts and practitioners regarding recommended elements that should be included in efforts to help students master reading, comprehension and study skills.

Brief Overview of Kurzweil 3000

Literacy goes hand-in-hand with academic achievement. As the premier curriculum-independent reading, writing, and learning software, *Kurzweil 3000* has been proven to be an effective solution for improving not only reading and comprehension, but also for achieving overall academic success particularly for struggling students and English Language Learners. As a technology, *Kurzweil 3000* also promotes and supports computer literacy in students and adults alike.

Because of its universal design, standards-based technologies and support for languages, *Kurzweil 3000* is also an effective tool for a wide range of people - including those with disabilities and limited English proficiency -- to access information and to communicate with others.

For students, *Kurzweil 3000* software provides the tools they need to improve reading fluency and comprehension. Easy-to-use features make it possible for them to both learn and study independently. Added assistance from *Kurzweil 3000* helps students complete reading, class and homework assignments, as well as standardized tests. A comprehensive set of tools allows students to learn and practice critical study skills. Integrated writing features provide students with a wide range of supports to show their mastery of material through their writing.

For schools, having *Kurzweil 3000* in the classrooms, resource centers and outside-of-school programs and locations, enables educators to reach and engage all students, extending their time for learning.

Because it is curriculum-independent and supports a wide range of file formats, *Kurzweil 3000* enables teachers and schools to easily incorporate and integrate academic, curriculum-based material with computer learning.

For English Language Learners, or for parents and family members who speak other languages, *Kurzweil 3000* encourages participation, communication and access to information. Material in English can be brought into the software and using built-in language dictionaries, users can look up the meanings of English words in their native language. These same language dictionaries also aid in writing in English.

Lastly, independent research studies have proven that *Kurzweil 3000*, as a technology, has a lasting impact on the motivation of struggling students, particularly in middle and high school levels, to learn both inside and outside of the classroom - a major factor not only in improving academic performance, but also in promoting engagement in learning and, eventually in the community.







Enhancing Education Through Technology and Kurzweil 3000 Alignment

Enhancing Education Through Technology Elements	Kurzweil 3000 Alignment
Extended time for literacy – both in Language and in computers	<i>Kurzweil 3000</i> takes advantage of current and portable technologies to broaden access and increase time for literacy beyond classroom-based and one-on-one instruction.
	Networked stations throughout a classroom or school enable teachers and administrators to distribute curricular material, while providing struggling students with access to content, assignments, as well as tools and supports while in class, in resource rooms or information centers.
	In outside-of-school programs or settings, the License-to-Go feature enables the use of the software on specific computers, while the <i>Kurzweil</i> <i>3000 USB Edition</i> and <i>Kurzweil 3000 Web Licensing</i> offers access via the Internet.
	Additionally, the ability to save material to audio files (MP3 and WAV) means students can listen to chapters or books on portable devices wherever they go.
Direct, explicit instruction in comprehension	<i>Kurzweil 3000</i> aids teachers and schools in direct and explicit instruction in comprehension as well as the systematic and direct instruction of proven study skills strategies. Because of <i>Kurzweil 3000</i> features' ease of use, instruction can be tailored for individuals' specific requirements.
	Electronic notes in a variety of accessible forms (footnotes, text notes, sticky notes, bubble notes, voice notes, column notes) offer teachers the ability to strategically place embedded explanations of concepts and instructions for students to access as they read and write. Students can use these notes to express learned information or formulate questions for teachers.
	Electronic highlighters enable teachers and students to prepare an array of prereading material, vocabulary lists and study guides. The Word List feature enables teachers to bring difficult words, as well as topic- or unit-based vocabulary, for students to use while reading and writing in <i>Kurzweil 3000</i> . Outline and Brainstorm features allow for quick creation of study guides or graphic organizers to spur critical thinking.
	In addition <i>Kurzweil 3000</i> includes built-in tools that enhance the teachers' ability to provide instruction, while promoting independent learning. These include the Syllables tool for decoding words; a recursive dictionary and picture dictionary support for learning word meanings; comprehensive reading settings, including Reading by Highlights for skimming and isolating key information; Read the Web for external sources of contextual meaning; and writing tools such as Word Prediction to aid in expressing knowledge in written form.
Modeling of reading and thinking strategies for comprehension	Using a multi-sensory approach, the software reads words aloud to students in clear, human-like, synthetic speech, while a patented dual highlighting feature adds visual reinforcement. Accessible and customizable features that promote repetition and practice put the pace of









	progress into students' hands
	Voice notes, in which teachers or aides can record reading, can serve to model pronunciation and expression. Students in turn can use voice notes to practice and show teachers their progress. Reading settings such as speed can be used to guide students through the levels of reading fluency, increasing the speed as fluency and comprehension improves. Electronic highlighters and a variety of electronic notes enable teachers to model and students to apply study skills such as extracting key concepts as a way of prereading, highlighting unfamiliar words as a way to learn vocabulary, and compiling important passages as a way of demonstrating comprehension. Brainstorm and Outline tools enable teachers to model and students to emulate the process of synthesizing and organizing thoughts.
Cooperative learning and discussion of text among students	<i>Kurzweil</i> 3000 lets teachers or students easily bring all types of reading material into the software, facilitating the participation of students who read below grade level in cooperative learning activities and discussions with their grade level peers, ultimately building the students' motivation and sense of achievement
Self-selected reading at students' ability levels to build motivation	Almost any written material can be scanned into <i>Kurzweil 3000</i> and read using the text-to-speech technology. In addition, students can access electronic documents, explore Internet-based materials, or select from hundreds of public domain fiction and non-fiction books and documents contained on the Classic Literature CD included with <i>Kurzweil 3000</i> . Students are able to self-select, view, and listen to reading material that might otherwise be beyond their reading ability.
On-going progress monitoring	<i>Kurzweil 3000</i> generates usage logs to track student statistics, including reading rate, dictionary use, length of reading sessions, and more.
	In addition, the Universal Library can be set up for students and teachers to share documents. In this way, teachers can listen to students' voice note reading to monitor pronunciation, or read students' notes to answer questions or to monitor comprehension.
Intensive writing	Writing experts recommend the following writing process: note taking, brainstorming, organizing and outlining, drafting and reviewing.
	<i>Kurzweil 3000</i> offers an integrated set of writing features that correlates to this writing process. Column Notes enables students to collect important facts, and key ideas. Brainstorm lets students use a graphic organizer to map and organize thoughts, while Outline lets them use standard outline formats to jot down and organize their ideas. Typical word processing features, as well as the audible Word Prediction and Word Lists such as Homophones and Confusable words, are available in the Draft mode. As a student types, the software speaks each letter, word, or sentence, facilitating self-correction. A customizable review list enables students to ensure that they check their writing before finalizing drafts.
	Two types of writing templates – one in graphic organizer format and the other in text document format – guide students through the creation of a range of writing assignments, from a one paragraph composition to a full-length compare and contrast essay.
	A range of language dictionaries not only enable English Language







