Kurzweil 3000™ Smartxt Project Evaluation Summary 2009-10
Monterey Peninsula College
Monterey, California
(Funded through the California Community College Basic Skills Initiative)

BACKGROUND

The Kurzweil 3000 Smartxt project at Monterey Peninsula College (MPC) began in the spring of 2009 and represents a collaborative effort between Supportive Services & Instruction, the English & Study Skills Center (ESSC), and faculty in the English, ESL, Child Development and Life Management departments.

Many of our students, not unlike those elsewhere in the community college system, are at best reluctant readers, struggling to overcome longstanding academic deficiencies, while faculty struggle to overcome student resistance to learning, born out of a history of failure and low self-esteem. As a consequence, many instructors are searching for new strategies to reach these students.

Kurzweil 3000 technology, historically used to support reading instruction for students with learning disabilities, is one of these new strategies. Its text-to-speech features combined with electronic study tools energize and motivate students to read and comprehend, while improving their overall study skills and facilitating formulation and editing of their writing.

Smartxt projects, which integrate Kurzweil 3000 technology into mainstream classes, are emerging across the state in community colleges, and are being adapted to suit the needs of individual students. The goal of the project is to adapt this technology into mainstream courses so its use could benefit all students, including those with undiagnosed learning challenges, basic skills needs or ESL, thereby embracing the spirit of universal design and facilitating learning for all students. This project involves students using technology to advance their basic skills needs, and it incorporates the effective use of the software by integrating it into the regular course curriculum. The technology is available for students to utilize in several areas of campus—the ESSC, the ESL Lab, the Business Skills Lab, the TRIO/SSS Lab, and both of the Supportive Services & Instruction labs.

In the first phase of the project the interested parties were identified and the plan was developed for implementation at MPC. The Kurzweil 3000 software was purchased and the alternate media specialist digitized the material. On March 20, 2009 staff training was held at the college. Twenty-nine people including faculty, staff, administrators, potential student mentors and off-campus faculty (Foothill College, Hartnell College, and California State University – Monterey Bay) participated. Participants were introduced to a broad range of reading, writing, and study skills built into the Kurzweil 3000 software. In addition, the Smartxt concept was introduced and strategies for embedding textbooks to guide students' learning in the reading process were presented. In January 2009, the Kurzweil 3000 software was installed in the ESSC and the ESL lab. An ESL instructor integrated the use of Kurzweil 3000 into two sections of his courses. In mid April two English faculty introduced the Smartxt concept to their English 321 classes. Students were provided with copies of the software to install on their home computers, along with the digitized books and materials.

In fall 2009, an additional English instructor utilized the Kurzweil 3000 Smartxt instructional model in two sections of her English 301 class. Students from the ENG 321 class who used the software were recommended into the ENG 301 sections that would be using the Kurzweil 3000. On November 18, 2009, another Kurzweil 3000 training was conducted at MPC with 15 staff and faculty participating.

In spring 2010 two instructors in the PASS Learning Community used the Kurzweil 3000 as a teaching tool in their courses. The Kurzweil 3000 software was installed in the Business Skills lab to provide additional access on campus. Publisher permission was obtained to digitize the entire novel being used in the English 301 course. The software was installed on over 200 workstations on campus and there are approximately 350 user accounts.

In fall 2010 the Kurzweil 3000 was installed on the computers at the Education Center in Marina and one of the Child Development courses is providing access to its students. The student mentor component of the project was initiated and on November 13, 2010 several student mentors from Laney College met with the student mentors at MPC to discuss implementation logistics. In addition, a student mentor has attended several classes on campus and in Marina to assist students when the program is introduced. The program coordinator will be meeting with the ESSC director to discuss the possibility of having student mentors working in the ESSC during specific hours in spring 2011 so students working in the ESSC can receive individualized assistance while using the software.

Evaluation Methodology

Both student and faculty evaluations were conducted to obtain feedback about the program's effectiveness, accessibility and application in the classroom. A brief video was compiled highlighting faculty and students' experiences with the project. The video can be accessed on the internet using this web address: http://bsimpc.blogspot.com. In addition, data was collected verifying the amount of time students spent using the software.

Student Survey

The student survey was conducted in the English 321 and 301 sections and the Life Management Skills class. Students were asked to respond to a number of statements about the software and its use. The percentages listed in the left hand column of the table below represent answers of either Agree or Strongly Agree to the statements listed in the right hand column.

(n=36)	Statements
69%	It was easier to take notes when I used the Kurzweil 3000 software.
65%	It was easier to stay focused when I used the Kurzweil 3000 software.
71%	It took less time to do the reading with the Kurzweil 3000 software.
69%	I had a better understanding of the material when I used Kurzweil 3000.
63%	Enjoyed reading more when I used the Kurzweil 3000.
70%	It was easier to highlight information using Kurzweil 3000.
85%	I would prefer to use Kurzweil 3000 to read my textbook
62%	When choosing classes, I would rather take a class that uses this technology than a class that does not.

Students shared additional comments regarding the Kurzweil 3000 software, some of which are listed below:

- I liked the fact that Kurzweil 3000 read what I've written because it shows me the errors I made in my writing.
- The tool that was most useful was when I copied and pasted notes or essay into the Kurzweil 3000 and let it read to me and would tell how good it is and determined the mistakes that I have made. So the Kurzweil 3000 does come in handy when doing an essay.
- I had a peace of material to read in a short period of time, I found it very helpful. I also used it for clustering before a prewrite with a paper.
- The Kurzweil 3000 tools I found most useful were the different voice choices. And the function where you are able to choose the speed of the reading.
- I found the highlighting to be very useful because it comes in different colors to identify what you are highlighting, and that you can erase highlights as well. I also liked having my papers read to me. It helps me pronounce words or get a better understanding from the tone.
- Having Kurzweil 3000 read to me was pretty cool. I also liked the fact that I can use the dictionary right off this Kurzweil 3000 program.
- The only thing I would say needs improvement is the different variety of voices. I think someone should read every word from the dictionary and record their voice and use it for the Kurzweil 3000 program. It would be easier to understand and the words would be pronounced more clear.

Faculty Survey

Faculty using the Kurzweil 3000 software in their classes was asked to respond to several questions. A summary of responses is listed below.

1. **What were the benefits of using the Kurzweil 3000 software and the enhanced digitized text in your class?**

    - Student motivation.
    - Students were interested in the technology and trying out its different features.
    - More than a few students seemed genuinely interested in signing up for the Kurzweil 3000 classes in the fall.
    - Students would remain alert for longer periods while reading and generated more content when writing.
    - A great tool to help students through the first few steps of the writing process where they free-wrote, clustered, outlined, and wrote the first draft. Students could use the software to see just how these steps work and how one leads naturally to another.
    - Students could listen to the texts and my embedded notes. Being able to hear these allowed students to hear how certain words are pronounced, their definition, as well as my notes to guide them on how they could respond to and annotate the text.
    - there has been a general improvement in both reading comprehension and quality of writing
    - Most students found the embedded notes easy to use and beneficial.
    - Most students enjoyed using the highlight function to annotate the reading.
    - when given a writing prompt that connected with the readings using the Kurzweil 3000 software, most students produced a great deal of writing with which to work.

- Most students found that having an assigned text read aloud to them enhanced their experience with the text.
- The technology did contribute positively to my class's development as readers and writers along with introducing them to this resource.

2. What were the challenges of using the Kurzweil 3000 software and the enhanced digitized text in your class?

- Biggest challenge is mine as the instructor in learning to use the technology effectively as part of instruction.
- Finding the time to be trained and the additional time spent prepping lessons (as is the case whenever an instructor is using a new strategy for the first time).
- heavy investment in time; had to take time out of the schedule to learn how to utilize the software; could not be done in the normal classroom, so we had to find other accommodations.
- Technology itself can be a challenge.
- Some students have trouble loading the software on their home computers.
- Somewhat disrupted the course schedule.
- Once students are in front of the screens, it is harder to lecture, discuss, and work as a group.

3. What types of barriers/challenges do your students face in regard to being able to really utilize and take advantage of this technology?

- accessibility
- Students should be exposed to the software in more than just their English classes.
- A few students find the experience of having text read to them by a computer displeasing.
- Some students suffer from general computer illiteracy; they have a hard time taking advantage of all that the software offers.

4. What are your goals and anticipated outcomes for using this technology in your class?

- To discover ways of incorporating more technology into my developmental English classes.
- To use the technology to help accomplish our main objective, which is to develop students' writing and reading skills and to introduce students to a very useful resource, which they could then possibly utilize in the next semester.
- Improves students' computer literacy skills.
- Help students understand the correct pronunciation of words they encounter in texts.
- Improve reading comprehension.
- Help students gain a better feel for the grammatical patterns of the language.
- Introduce students to this potentially useful literacy technology for use in future classes.
- Use the technology to contribute to the students' continued development in writing, reading, and thinking.
- Expand their computer literacy skills.

Kurzweil 3000 Software Data

In Spring 2009, the Kurzweil 3000 software was installed on approximately 250 computer stations on campus (LTC, ESSC, GC labs, Business labs, SSS/TRIO lab). In Fall, 2010 the software was installed at the Marina Education Center, thus accomplishing one component of the project's "institutionalization" and further addressing the issue of accessibility.

When the Kurzweil 3000 Web Licenses were purchased in January 2009, students were given individual logins and passwords in order to track usage of the software. Students were also given copies of the software for home use, thus providing access to the Kurzweil 3000 both on and off campus. Unfortunately, there were a number of technical problems with the individual login accounts and it became necessary to implement a universal login system to minimize issues. As a result, general data was collected and a summary and analysis of this information follows.

Between January, 2009 and November, 2010, the Kurzweil 3000 software was used for a total of 14,328.2 hours. One of the English instructors used a different login account for his class so more specific data was collected for 2009. His 321 and 301 sections showed 158 logins and the software was utilized for a total of 164,557 minutes or 2,742.6 hours during the 2009 spring and fall semesters. Between January 2009 and November 2010 the universal login account had 3,637 logins for a total of 179,762 minutes or 2,996 hours. Based on this data, it is clear that students are using the software quite frequently and for extended periods of time.

In January 2011 we will be upgrading to the new version of Kurzweil 3000 which will enable schools to keep a record of students' activities as they work. The program can record such actions as definition look ups, spell checking and reading speed changes. After the user activity data is collected it can be used to generate reports that incorporate selected data. This will allow for more targeted analysis, which in turn, can more effectively inform instructional content and methodology.

Looking to the Future

Going forward into next semester we face a major challenge in the upgrade from version 11 of Kurzweil 3000 to version 12. Not only does the old version need to be uninstalled and the new version installed, this process will need to be coordinated with Kurzweil 3000 personnel since the two versions use different web licensing authentication protocols. Upgrade of the on campus computer labs will be handled by the lab technicians, but there are a significant number of off-campus student installations that will require various levels of technical support. We are optimistic that the transition will be a smooth one.

Along with the challenge of the upgrade is a tremendous opportunity for expansion of the project. Laney College is currently running a pilot project using the Kurzweil 3000 and other technology in basic skills math classes. The preliminary data and feedback is promising. Kurzweil 3000 V12 offers additional support for English Language Learners such as a picture dictionary with more than 1300 graphics in English and Spanish and human voice pronunciations from the American Heritage® Dictionary. The writing supports have been enhanced; thereby streamline the starting points for writing, and making it easier to access writing templates. These improvements will allow faculty to enhance their instruction which will in turn benefit students in these classes.

The project team hopes to expand to include more faculty, and would particularly like to include a basic skills reading instructor. Given the time and effort involved, it is understandable that faculty might be hesitant about making this commitment. However, the use of this technology enables them to support the principles of Universal Design for Learning (UDL) in their classes thus allowing students of all abilities to engage more meaningfully with written text. In keeping with the mission of the Basic Skills Initiative, this project will continue to enhance basic skills instruction by integrating universal learning design principles, thus creating clearer pathways for student success.

For more information about the Kurzweil 3000 Smartxt Program in California, please visit the following website www.smartxt.com.

For more information about the Kurzweil 3000 Smartxt Program at MPC, please contact:

Kathleen Rozman
Project Coordinator
Monterey Peninsula College
Monterey, CA
krozman@mpc.edu
831-645-1350

You can also check out the MPC blog at http://bsimpc.blogspot.com.

For more information about the Kurzweil 3000 please contact your local account executive at www.kurzweiledu.com/contact_us