IBM

IBM Reading Companion Web-based literacy grant program

Reading Companion provides a virtual library of books for learners to read aloud and receive immediate audio feedback through interactive software.

"Regardless of how children and adults learn how to read, one thing is clear: practice is the key to success. Reading Companion has the powerful capacity to improve reading skills by giving the learner time for individualized feedback and reinforcement. And it's available 24/7 via the Web."

Robin Willner
vice president, Global Community Initiatives
IBM Corporate Community Relations

"You sound great!" Music to the ears of anyone learning to read. With IBM's Reading Companion program, emerging readers immediately hear such statements after reading aloud from a library of virtual books. The audio feedback is the result of a groundbreaking interactive software application developed by IBM Research.

In 2006, IBM is providing grants to 100 schools and nonprofit organizations in the United States, Canada and international locations, offering free access to this revolutionary software application at www.readingcompanion.org. More sites will be added in 2007 and beyond.

Functionality, worldwide applications

At the heart of Reading Companion's effectiveness is its simplicity. Practicing readers are equipped with headset microphones that are connected to their computers. They select an e-book from the virtual library and read the phrases and sentences aloud.

 The Reading Companion software "listens" and then provides immediate audio feedback on pronunciation and accuracy. Accurate readers receive positive reinforcement from the "companion tutor." Those readers having difficulties will hear a gentle reminder to try again or a correct reading of the words.

Reading Companion availability via the Web means ongoing, anytime/anywhere access for children and adults in need of improving literacy skills.

24/7 availability

Reading Companion's availability on the Web enables students to have access via their home, school or community organization, and users are able to continue their lessons exactly where they left off in previous sessions. In addition, Reading Companion includes evaluation reports for instructors and teachers on the progress of individual students.

In 2006, IBM will provide 100 Reading Companion grants throughout the world. More sites will be added in 2007 and beyond.

"Not only is it a great example of 'software that makes a difference,' but it is also 'innovation that makes a difference,'" said Jennifer Lai, IBM Research Manager, Adaptive Learning.

"Since this is the first-ever combination of these technologies -- that is, voice recognition technology over the Web -- we expect there will be other opportunities for using this model of fast and accurate speech recognition on demand and on the Web."

Independent evaluations of the technology demonstrate that children who use the software tested significantly higher on word recognition and comprehension tasks. For adults, the software not only improved reading skills but also helped improve their English pronunciation.

Complementing existing literacy curriculum

"This interactive tool is a tremendous asset to have available in our classroom," said Kitty Bateman, Adult Literacy Coordinator, Queensborough Community College, located in New York City. "We have large numbers of adults in search of literacy competencies. This will work great with this audience and within the program we already have."

For JFK Magnet School principal Louis Cuglietto, Reading Companion is a great asset for the teachers and students at his school in Port Chester, NY. "Imagine being a second grader, working with voice recognition software that helps you read and pronounce correctly. Reading Companion will complement our literacy curriculum, will be fun for our students, and will be an added resource for our teachers."

For more information about IBM Corporate Community Relations, go to **ibm.com**/ibm/ibmgives

IBM translation technology bridges language divide between schools, Hispanic community
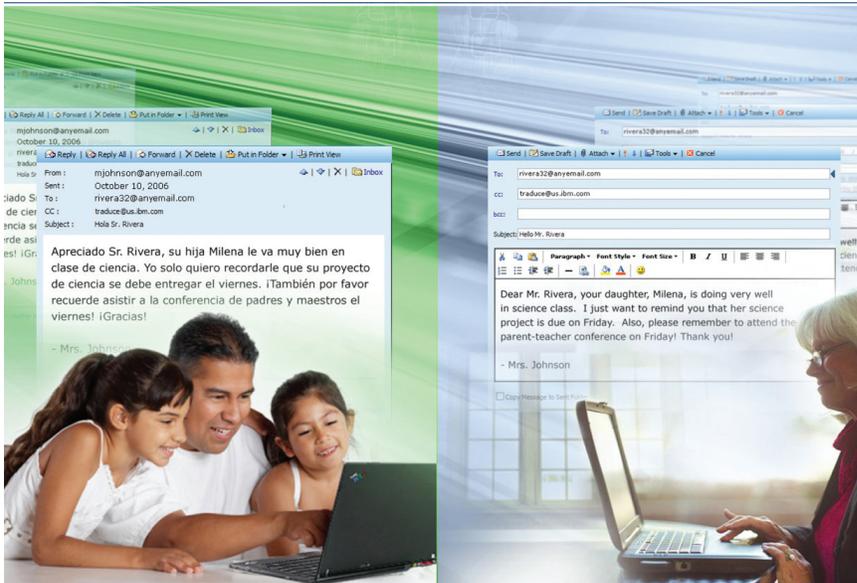
IBM's ¡TraduceloAhora! enables bidirectional translations (English-to-Spanish and Spanish-to-English) of e-mails between parents and teachers.

"¡TradúceloAhora! eliminates language barriers between Spanish speaking parents with limited English skills and educators. It's like a veil has been lifted…Now I can directly communicate with these families about the progress their sons and daughters are making in my classes."

Pamela Dennis,
Math Teacher at Washington Irving High School, New York, New York

Imagine for a moment if the flood of e-mails you receive daily suddenly became an indecipherable series of fonts and symbols. Unfortunately, this scenario is a reality for many Spanish-speaking individuals with limited English skills. It's a situation that is especially frustrating for parents when it comes to online correspondence with their child's school.

Now, there's a revolutionary solution: ¡TradúceloAhora! (TranslateNow!), a grant program featuring IBM automatic translation technology.

Bidirectional translations

IBM is providing 50 schools and nonprofit organizations in the U.S. and abroad with grants of ¡TradúceloAhora!, enabling bidirectional translations (English-to-Spanish and Spanish-to-English) of e-mails between teachers and parents. Additionally, the organizations can use the technology to translate Web sites from English to Spanish automatically, helping to address the Hispanic Digital Divide.

¡Tradúcelo » AHORA!
T R A N S L A T E   N O W

www.traduceloahora.org

"The Digital Divide means more than simple physical access to a computer," said Robin Willner, vice president, Global Community Initiatives, IBM Corporate Citizenship and Corporate Affairs. "It's the ability to access relevant Web content and understand important information available on the Internet. It's equally important for Spanish-speaking parents to understand critical e-mails on school-related topics from their children's teachers."

IBM WebSphere Technology

A prior — and continuing — IBM ¡TradúceloAhora! grant program focused on Web site translation and involved nearly 30 organizations in the U.S. This effort enabled thousands of individuals to access information in Spanish, concerning jobs, health care, immigration, legal aid and education.

IBM researchers have now developed an automatic bidirectional e-mail translation feature for ¡TradúceloAhora! The technology, which features an enhanced version of IBM WebSphere® Translation Server software, is available to selected schools serving predominately Latino populations.

"The ¡TradúceloAhora! grant program now enables easy bidirectional communication via email among students, parents, teachers and school administrators," said Michael McCord, manager of Language Analysis and Translation at the IBM T.J. Watson Research Center in Yorktown Heights, New York.

"This tool uses the latest communication and collaboration technologies, and thus contributes to IBM's goal to increase technological literacy among underserved populations."

The Tomás Rivera Policy Institute, recognized as the nation's premier Latino think tank, conducted an independent evaluation of the grant program and concluded that the ¡TradúceloAhora! automatic translation software was of significant benefit to the participating organizations and their constituents.

*For more information on IBM Corporate Citizenship and Corporate Affairs, visit **ibm.com**/ibm/ibmgives or call 914-499-1900.*

¡TradúceloAhora!, an IBM program that automatically translates Web-based materials, has been expanded to include e-mail translations.

¡TradúceloAhora! Highlights

- Uses an enhanced version of IBM WebSphere Translation Server software developed by the IBM T.J. Watson Research Center in Yorktown Heights, New York.

- Provides automatic e-mail translations (English-to-Spanish and Spanish-to-English) between parents and teachers in less than three minutes.

- Builds on the success of the IBM ¡TradúceloAhora! grant program, which focused on Web site translation that involved nearly 30 organizations in the U.S.

- IBM is providing 50 schools and nonprofit organizations in the U.S. and abroad with grants in 2006. More grants will follow in 2007.

- Endorsed by The Tomás Rivera Policy Institute.

TryScience:
The world's first global science museum

Middle school girls conduct a www.TryScience.org experiment in Raleigh, North Carolina. Students, parents and teachers now have instant access to a world of scientific adventure.

A siren blares as an intruder flees with a priceless Mayan artifact from a South American exhibit. Local authorities rush to investigate the crime. Meanwhile, students observing the caper online in classrooms and museums from Canada, Italy, Mexico and the U.S. assist police by matching their recollection of the *perp* against subject files.

The crime is fictional: an exercise from www.TryScience.org called *Suspect Sketcher*. But the dynamic online challenge requiring intuitive deduction and attention to detail—the basis for all scientific discovery—is real.

The exercise is just one of many educational learning adventures available at the site.

"Suspect Sketcher displayed for the world how excited children can get about science when it's presented in a fun, entertaining format," said Paula Baker, director, IBM Corporate Community Relations. "TryScience is the collective knowledge of thousands of science experts in subjects ranging from archeology to zoology and it's presented in a way that ignites the imagination of children."

"The future belongs to those who will understand and use science and technology in ways that we can only imagine today. What we have all witnessed in the last decade—the wholesale transformation of society through computers—is only the infancy of the information revolution.

"TryScience is one prominent example of how technology is expanding our horizons and unlocking the limits of what is possible."

—Paul Horn
 Senior vice president
 IBM Worldwide Research

Power Up: IBM's new "Green" 3D multi-player game

Power Up highlights energy, engineering, and diversity to help students address and solve global environmental issues—all in 3D!

"Power Up is a great way to demonstrate that 3D gaming technology can be used to teach and excite kids about engineering, math, science, technology and problem-solving."

–Paula Baker
Vice President
IBM Global Community Initiatives

On February 16, 2008, IBM launched Power Up, a new 3D Internet, multi-player engineering virtual world energy-themed game sponsored by Corporate Citizenship and Corporate Affairs.

"As the co-sponsor of EWeek 2008, IBM wanted to develop a legacy project that applies virtual world gaming technology to engage students in solving real-world problems," said Paula Baker, vice president, IBM Global Community Initiatives. "Power Up meets those goals and it's really fun to play!"

IBM innovators applied their knowledge in 3D and virtual worlds to develop the game in about 16 months. Nearly 200 kids and teens, aged 12-16, served as advisors to IBM researchers during the game development. The activities and game content were created in collaboration with the TryScience team from the New York Hall of Science working with The Tech Museum in San Jose, California, the Bakken Museum in Minneapolis, Minnesota, and The National Renewable Energy Laboratory.

Power the Planet!
Focusing on energy, engineering and diversity, the objective of the game is to generate clean energy—while racing to save the planet from ecological disaster.

Power Up players are encouraged to generate clean energy, as seen here in the "Hydroelectric/Water Area".

Each area of the energy-themed worlds—water, solar and wind—has a major challenge to be solved, all with four objectives and clear measures of success. The game also allows players to interact with non-player character engineer "guides" whose personal experiences were provided by professional engineering societies from various diverse backgrounds. To ensure a safe environment for children, avatars will use phrase-based chats to interact in missions.

Along with the game, there will be classroom lesson plans associated with the energy transformation topics and an interactive module where kids can learn about 3D technologies to build virtual worlds.

Power Up & TryScience
Power Up is part of a continuing collaboration among IBM and its TryScience partners to deliver interactive experiments and science activities for students.

www.TryScience.org, "the world's first global science museum", gives children, parents and teachers instant access to the best information and interactive experiments from hundreds of museums. IBM created the site in collaboration with the New York Hall of Science and the Association of Science–Technology Centers (ASTC).

Since its introduction in 2000, TryScience has received millions of unique visitors and has been included in Popular Science's "50 Best of the Web."

IBM employees and EWeek volunteers are encouraged to bookmark the Power Up site for easy access throughout the year.

*For more information on IBM Corporate Citizenship and Corporate Affairs, visit **ibm.com**/ibm/ibmgives or call 914-499-1900.*

Highlights of Power Up

• *Web introduction*
 – Web teasers, multimedia game introduction, links to downloads
 – Register & login
 – Avatar customization

• *Orientation Center*
 – Welcomes user to game, give tips to get started (HUD, keystrokes, initial objectives)
 – Meet other players and engineers
 – Social center of game

• *Consult with an engineer*, Non-Player Characters (NPC) will:
 – Act as guides throughout the gaming experience
 – Represent a diverse cross section of the population (ethnicity, ages, etc)
 – Have a personal back story provided by Diversity Council member organizations

• *Phrase-based Chat and Teaming*
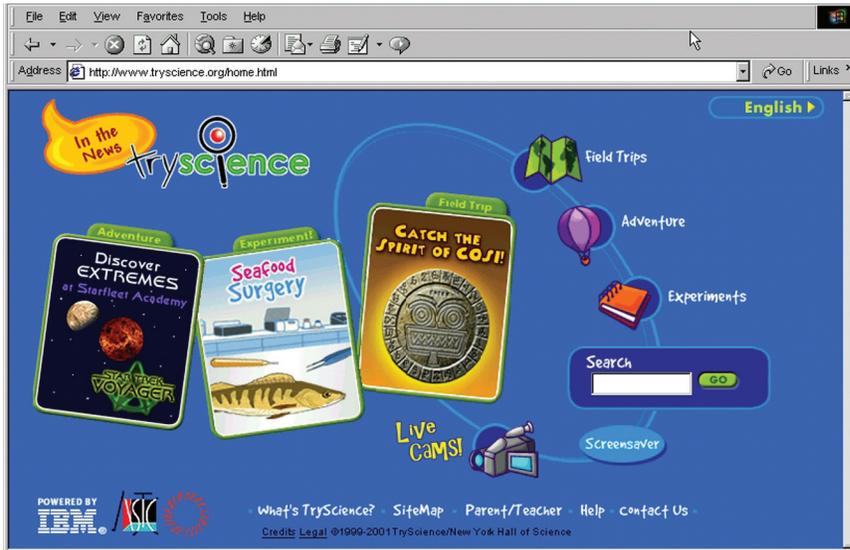
www.TryScience.org is a terrific resource for annual school science fairs, in-class science projects and family learning experiences. The Web site is currently available in Chinese, English, French, German, Italian, Japanese, Portuguese and Spanish.

On demand science: 24/7 fascination and discovery

At www.TryScience.org, children, parents and teachers have instant, continuous access to the best information and interactive experiments from more than 600 of the world's finest museums.

IBM created the site, which is now available in eight languages, in collaboration with the New York Hall of Science and the Association of Science-Technology Centers (ASTC).

On November 19, 2002 students from the U.S., Canada, Mexico, Italy participated in a live, interactive demonstration of the TryScience exercise "Suspect Sketcher" for parents, teachers and the media.

Since its introduction in 2000, this site has received millions of unique visitors and has been included in *Popular Science's* "50 Best of the Web."

Features include science experiments that can be conducted on- and off-line, field trips to science centers throughout the world, exciting adventures in science and real-time live cams. It's the world's first global science museum.

TryScience kiosks: A network of science showcases

At the end of 2004, more than 100 TryScience Around the World kiosks were installed in museums around the world. These scientific showcases use three-dimensional rich graphical interactive science adventures that complement the TryScience.org experience. Content is developed by the New York Hall of Science and ASTC museums and the entire network is centrally managed and updated by IBM.
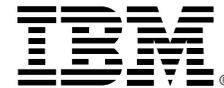
Museum visitors to TryScience Around the World kiosks can e-mail themselves online postcards that contain a link to the www.TryScience.org Web site.

www.TryScience.org features five distinct areas to explore:

- Adventure — interactive experience
- Experiments — hands-on scientific activity
- Field trips — visit science centers throughout the world
- Curious — investigate scientific topics in the news
- Live cams — offer a real-time look at some of the world's most interesting science and technology exhibits.

At a time when many nations across the world are seeing stagnation or dropping achievement scores in science and math, www.TryScience.org and the TryScience Around the World kiosks offer a new resource to stimulate the minds of the future.

For more information on IBM Corporate Community Relations, visit **ibm.com**/ibm/ibmgives or call 914-499-1900.

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