Researchers at IBM's India Research Laboratory today announced that they have developed a Web-based, interactive language technology to help people who speak English as a second language improve their speaking skills.

Based on advanced speech processing techniques, the technology was initially developed for a leading call center in India to help improve the capabilities of their agents. Yet, the technology has broad applicability for individuals, as well as in schools and businesses, where increasingly global operations will depend on clear communications skills among employees.

The technology evaluates grammar, pronunciation, comprehension and other spoken-language skills, and provides detailed scores for each category. It uses specially-adapted speech recognition software to score the pronunciation of passages and the stressing of syllables for individual words. The technology also consists of voice-enabled grammar evaluation tests which identify areas for improvement by highlighting shortcomings and providing examples of correct pronunciation and grammar.

"We are focused on the application of our technologies in ways that matter to people, business and society," said Dan Dias, director of IBM's India Research Lab. "English has become the common language of the business world, so the ability to communicate effectively in English can dictate success or failure in integrating into the global business environment."

Learning conversational English is not easy, especially for those living in countries where English is not the first language. Students, in particular, are always looking for a better tool to help improve their language skills. Teaching English as a second language necessitates spending a substantial amount of time and resources trying to improve the quality of English spoken by the students. In countries like India, not having enough teachers whose mother tongue is English compounds the problem. Students speak one language at the school or college, and then go back to speaking their first language at home, reinforcing pronunciations from their mother tongue, which means they need special skills. IBM's technology is designed for easy learning, allowing students to interact with the tool as if they are playing an online game. If a student mispronounces a word, the learning tool can immediately spot it and help correct it.

"Globalization is a significant driver, and I hope this technology can help develop the language skills that are absolutely necessary for an individual, company, region and country to compete in a global labor market," says Dr. Ashish Verma, a researcher at IBM India Lab, who is working on the project.

Source: IBM