



WORLD LANGUAGES AND TECHNOLOGY

The past decade has seen a revolution in how languages work. Technology is now considered an essential component of every language-related area – learning, translation, interpreting, and more. Machine translation, automated speech recognition, network analytics, and other technologies have been fused with well-known increases in computing power, storage capacity, and bandwidth. Applications unforeseen as little as 10 years ago, in particular in social media and cloud computing, have generated whole new fields of activity for language. Below are some key ways language and technology now intersect.

Translation and localization have been completely transformed by technology. Translation work now relies on Translation Memories (TM), Content Management Systems (CMS), Machine Translation (MT), and Translation Management Systems (TMS) to connect and manage globally distributed teams. Today's technologized translation industry is able to process an unprecedented volume, velocity, and variety of languages with greater consistency and reuse than ever before. Language technology has generated new categories of skills and jobs, and the opportunities for language work are exponentially greater.

Interpretation, still largely a face-to-face or in-person service, is increasingly being provided remotely on demand and for scheduled meetings. New forms of remote interpreting are emerging to meet increased demand in different settings. These platforms make use of wireless Internet, VoIP, video and web conferencing and other technologies to expand access while reducing costs associated with traditional service.

Second Language learning and teaching: Technology affords many advantages, among which are:

- Access to language instruction at a distance, including remote communities ([Middlebury Interactive](#));
- Access to pedagogically appropriate authentic materials in almost any language via the web ([SCOLA](#));
- Access to native speakers for conversation practice through language learning social media sites ([WeSpeke](#));
- Tailoring curricula to optimize classroom time and homework ([Transparent Languages](#)).

Taken together, learning technology is transforming language education in the US, allowing students to interact with authentic language sources, communicate directly with speakers of other languages, and work individually, with classmates, or with groups in the country of the language being studied. Technology enables flipped classrooms and facilitates teachers' ability to meet the Common Core standards. Effective use of blended learning technologies has resulted in higher language proficiency outcomes, lower costs, lower attrition, and greater learner motivation at multiple US Government and academic language programs. Technology is also helping to level the playing field for certain students, including the non-traditional student, working students, students with families, and students with disabilities.

Preservation of languages of lesser diffusion and endangered languages is now possible because of digital recording technology, web-based access, and the ability to create new character sets. As a result, some languages have been rescued from the brink of extinction, and more than 1,000 languages are now active and commercially viable online.

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