

## Learning to read by reading

The Mudoc Corporation is developing a new reading technology that will enable any nonreader to immediately start reading. The *mudoc technology* will turn the PC into an electronic reading machine that has all the visual, aural, reference, linguistic, and software tools needed to make understandable any text being presented to the reader by the computer. The nonreader who uses the mudoc tools will start reading slowly, but will gradually (and sometimes rapidly) acquire the knowledge and skills needed to understand any text, whether it's computer-aided interactive text delivered by a computer – or conventionally printed static text.

The principal tool in the mudoc technology's tool kit will be a software invention, *interactive movable type*. Interactive movable type will provide a new and different kind of relationship between text and the reader. In preparing to present itself to the reader, an interactive document will configure itself to satisfy the particular needs and capabilities of the person who will be reading it. Using personal data provided by the reader, each document will come designed to make optimal use of that reader's particular perceptual and cognitive capabilities, however extensive or limited those capabilities may be. And, while in the process of presenting itself to the reader, the document will always be ready to immediately stop and respond to any request or change that the reader might ask of it.

Underpinning interactive text will be *reference substructures* that will give the words in the text a new kind of transparency. The reader can ask any word in the text to explain itself – to tell the reader about its pronunciations, definitions, grammatical characteristics, etymology, and if any exist, about its synonyms, antonyms, homophones, and homographs. Other helpful information a word might provide about itself could include examples of use, pictures, drawings, maps, charts, tables, graphs, voices, music, sound effects, video clips, and any other descriptive or explanatory information about the word that might be available in the reference substructure. (Accessibility to these tools will be like having a live-in linguist!)

In addition to the interactive movable type software (usually called *the mudoc software*) and the mudoc reference substructures, other empowering mudoc tools will include speech synthesis (i.e., text-to-speech), speech compression, and speech recognition software applications. Another fundamental tool will be an easy-to-use document design application that the reader will use to spell out the specifications to be followed in preparing a particular mudoc publication for presentation to him or her. In functioning as an integrated group, the mudoc tools will provide their users with a new kind of verbal empowerment – a capability that will not only let nonreaders become instant readers, but one that will enable most users to achieve previously unattainable levels of speed and comprehension in consuming text.

The tools of the mudoc technology could bring about dramatic reductions in the costs of reading and literacy training in our schools and elsewhere. Through their use, most children could be reading proficiently before the end of the first grade. The tools could provide solutions to most reading problems. The tools could enable every nation to move rapidly to full literacy at costs they can afford.

Through the attainment of universal literacy around the world, humankind could reverse its present destructive course. To see the kind of world that is now becoming possible, take a look at the Web pages “On Saving a Dying Planet” and “Life in a World of Superreaders” at <http://www.mudoc.com/sustainingEarth.pdf> and <http://www.mudoc.com/crwr/crwrscr8.htm>

**To learn more about the tools of the mudoc technology, go to [mudoc.com](http://www.mudoc.com)**