

SPEAK AS YOU SEE (SAYS)



PRONUNCIATION SOFTWARE PROGRAM

Speak As You See (SAYS) is a unique 3D animated pronunciation software program which will revolutionize two worlds. The first is the huge group of foreign language learners all over the world; there are estimated to be around 1 billion people learning English either as a foreign or second language. The second group comprises the millions of people in the world who suffer from various communications disorders; it is estimated that 4% of any population suffer from some kind of communication disability.

So what is it? SAYS is a computer program to improve pronunciation. Many speech language pathologists (SLPs) and instructors of foreign languages know that one of the most difficult aspects of pronunciation is describing what is happening inside the mouth during speech. SAYS uses realistic 3D computer animations to show exactly what is occurring in a way that ANYONE can understand.

In the past, both for SLPs and their patients, and for foreign language teachers/learners, data from users has been recorded and presented in what are widely known as spectrograms. Because it is feedback, even this confusing data has been shown to have a beneficial effect when used by SLPs with patients and language teachers with students, but it is incredibly difficult to interpret and decide what the graphs are showing. Enter SAYS. There is now no need to try to imagine what the tongue is doing during speech; no need to guess how wide open the jaw is because you can see it all. The lifelike models are very easy to understand.

For foreign language learners, they will be given the opportunity of seeing what a native speaker does when pronouncing words. For people with aphasia and other medical problems, the process of learning or relearning how to speak can be greatly eased by seeing what they should be doing, right there on the screen in front of them.

The software is designed both for SLPs to use with patients and the user-interface is simple enough for a patient to use by themselves when practicing. The same applies for foreign language teachers and learners. In fact, the design is originated by veteran

ESL teachers and an experienced SLP closely cooperating on the design for communication disorder patients right from the very beginning. This means that many years of experience have gone into a design which will actually work, both for professionals and the end users.

In an initial test of students using the SAYS prototype, there were dramatic changes in their pronunciation after using the software for less than 15 minutes. Their ability to differentiate their pronunciation between words with **R** and **L** sounds for the first time after such a short spell of practice was quite astounding.

Through extensive research, the program developers have selected consonant sounds which are of particular difficulty for learners. These sounds and words are often ones which are mispronounced from generation to generation and are thus difficult to eliminate.

The program presents twenty consonant sounds and words: six initial consonant sounds (**TH, L, R, V, CH & SH**) and associated practice words (**though, light, right, van, chair & share**) and five final consonants (**S, T, Z, CH & SH**) and their practice words (**fuss, fight, buzz, wash & watch**).

Most of the sounds learnt have at least ten extra practice words (non-animated) or a total of over 100 practice words. These extra practice words also include polysyllabic words, chosen carefully to allow students to also practice stress patterns and be aware of silent letters or difficult spelling combinations. Many of the extra practice words are ones which are typically mispronounced by a lot of learners of English.

There are a total of sixty (60) animations--three animations for each sound and word, showing a frontal view, side view, and a cutaway view (or view from inside the mouth), so the students understand exactly where to place the tongue in relation to the palate and teeth, in order to produce the correct sounds.

In addition to the software, a specially-designed suction mirror is included in the package. The mirror is shaped to concentrate specifically on the mouth region and therefore the user avoids other facial distractions such as expressions etc. The mirror, can rotate and can be placed at the most appropriate height to allow for easy eye movement between the screen and the mirror thus facilitating ease of learning.

This program could not have existed without the considerable input of speech scientists who have reviewed and given enthusiastic feedback about the effectiveness of the software to bring about drastic changes in pronunciation.