



WordQ / SpeakQ by Quillsoft Ltd.

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System Requirements: Windows 98, ME, NT (SP6+), 2000, XP
Minimum RAM: 128 MB (256+ MB preferred with installation of high quality speech)
Hard Drive Space Required: 200+ MB.
Minimum Processor: Pentium 500 MHz or equivalent
Sound Card and speakers or a headset required

SpeakQ is a plug-in voice input program used with WordQ™ v2 which is a writing tool with advanced word prediction and text-to-speech capabilities. It is cheaper to purchase both products as a package. Using SpeakQ, students can dictate, type, or choose word predictions from a list, or alternate between methods whenever they like. Each tool is optimised to enhance the effectiveness of the other. SpeakQ can be used by a wide range of ages who have problems writing and editing, particularly those with learning disabilities. It can increase productivity, independence, self-confidence, self esteem and motivation.

The main advantage of SpeakQ over other similar products is that it is simple and easy-to-use and can be used with any standard Windows based writing software like Microsoft Word, WordPad, Notepad, or Outlook. It does not replace full-function products such as Dragon Naturally Speaking or Via Voice. SpeakQ is intended for students who can type. It is not "hands-free." There are no voice commands except for basic punctuation such as period , comma, new-line, new-paragraph.

Training

One of the big advantages over programs like Dragon and Via Voice is the ease of training. Users can select training passages according to their reading ability and additional passages can be added easily. The training can be done in very short segments. During the training process, SpeakQ automatically reads the text and the user can then repeat the spoken words or phrases at their own pace. At the same time, the training display minimizes visual distractions, and accommodates users with visual differences.

SpeakQ supports two styles of dictation

As with all voice input software, SpeakQ targets students who have strong verbal skills but struggle to read and write. There are two methods of speech input:

1. Continuous Speech: Like other speech recognition programs, it allows users to dictate text directly into their documents.
2. Similar to the old Dragon Dictate, spoken words can be displayed as a list of choices enhanced by word predictions. Users select from the list of words, or type letters to refine their choices. Using this approach, students control the words entered into the document as they speak. This improves accuracy so students spend less time correcting recognition errors and more time writing. After one to three letters of a word are typed or after the word or phrase is spoken it is displayed in a box with four alternate words or phrases that the software predicts. Each word or phrase can be clicked to hear it before selecting the correct one and inserting it into the document. The most likely word or phrase is predicted, based on age appropriate vocabulary tailored and the writing style of the user. A user can type what they can then when they have difficulty, say the words and rely on speech recognition.

Common to both methods:

- You can use either discrete words or phrases with either method.
- Recognised text is spoken back to help monitor what is or will be written.
- Correction uses "speech-enabled word prediction" where speech data is mixed with the user's own prediction vocabulary so the correct word can be selected with a minimum number of keystrokes.

For example If, using continuous speech, "I am going on a holiday." Was inserted onto the page, but, you actually said "I am NOT going on a holiday." You could press <ESC> to remove the phrase "I am going on a holiday." and start typing using word prediction. After typing/predicting "I", "am", "not" to insert the word "not" the subsequent word predictions would include "going", "on", "a holiday" at the top of the word list so you could replace the phrase "going on a holiday" with three selections of number "1".

SpeakQ remembers your speech and mixes it into the prediction possibilities to allow new words to be added or existing words to be deleted. SpeakQ utilises Microsoft V6 Recognition engine. There are a number of speech options and functions that can be accessed from within the program such as a hot key to turn the microphone on or off and the option to automatically turn the microphone off while editing, after speaking or never. Sliders control recognition accuracy and sensitivity. Users speech files can be backup and restored either as protection or to transfer to another computer.

Word Prediction

When you type a letter or speak a word, SpeakQ predicts what you might want to write and displays a list of correctly spelled words from which you can choose. When you see the word you want, you can choose it with a single keystroke or with the mouse. If you need help deciding which word to use, each word can be read aloud before you make a selection. In-context prediction makes corrections easier by displaying appropriate word predictions wherever the text cursor is placed, even when the cursor is in the middle of a word . The word prediction box disappears when any arrow key is depressed. Prediction vocabularies can be expanded, focussed on a specific topic, or limited to aid learning and success. There are a number of different options for the prediction box such as changing font, size, number of words in the box, whether the words are arranged by most likely or alphabetical. The box can be vertical or horizontal, remain stationary or follow the cursor and selection can be by number or mouse. Several starting user vocabularies are included using UK spelling at different writing and age levels. WordQ 2 continually learns how you use words so that it improves over time. Specific topic lists can be created to improve prediction rate. Different people can each have their own user vocabulary. Saving user vocabularies and usage examples as an independent file allows easier editing and sharing with other users.

Spell Checker/ Homophone Finder

The need for a separate spell checker and homophone finder has been avoided by incorporating these two processes into the original writing process. Commonly confused words, such as "there" and "their," are indicated with an arrow in the prediction panel and a sample sentence helps with correct selection. Creative spelling is supported as the user types, predicting words with spellchecked suggestions. Word prediction suggests words when you have trouble spelling or choosing the right word. The spell check within MS Word can be utilised and words from the drop down list read aloud.

Text to Speech

Although there are no Australian voices there is a high-quality natural sounding Acapela speech engine with a clear, British voice. Volume, speed and pitch can all be altered from within the program. Additional foreign language voices can be purchased. Typing feedback can be altered to speak letters, words or sentences. The user can choose to have word predictions read and also menus, spell check lists and file names etc. There are a number of hot keys including speech on/off, read text and replay recognised speech.

A special text-reading mode helps with proofreading. Documents in Microsoft Word, WordPad, Notepad or Outlook can be highlighted and read aloud within that application. After typing a sentence, it can be automatically read it back. Then you can hear if there are any mistakes such as missing words or punctuation.

The single user licence of SpeakQ 2 is for use on one computer. Since SpeakQ 2 is designed to support multiple vocabularies, multiple users may use SpeakQ 2 on this computer by choosing individualised vocabularies. If a school buys a single user license exclusively for a particular student, that student may use the software at school and at home.

Personal Opinion

Having tried SpeakQ with a number of students who struggled with Dragon Naturally Speaking or the Voice Input from Text Help Read & Write, I have found it successful for a number of reasons. Firstly the training process is much easier as training passages can be selected according to reading ability. The training can be undertaken in shorter segments. For those who struggle with reading the program reads the text in manageable phrases for them. For students whose speech is not so clear, or who have difficulty thinking in phrases or sentences, they can compensate with typing or word prediction. As the program becomes more accurate at recognising their speech they can decrease their dependency on the other functions. Because of the blend of functions, what goes into the document can be reasonably correct first time which decreases the process of editing which so many students with difficulties find tedious and difficult.

For students with clear, concise speech and reasonable reading ability, Dragon would be my first choice for Voice Input but for those who struggle with reading, the complexity of correcting errors or whose speech is more hesitant or lacks clarity, Speech Q is an excellent starting point.

Features	WordQ 2 / SpeakQ 2
Australian voices (Karen and Lee)	No
Clear Acapela British Speech	Yes
Alter pitch	Yes
Speed control	Yes
Volume	Yes
Word pause	No
Specify length of word pause	No
Speak as you type	Yes
Speak by letter	Yes
Speak by word	Yes
Speak by sentence	Yes
Auto read features	Yes
Edit pronunciation	limited
Foreign Language support (import speech engines)	Yes
Reads information from the web	Yes (manual highlight)
Reads PDF files	Yes (manual highlight)
Spell words aloud	No
Block highlighting	No
Dual highlighting	No
Words	Yes
Sentences	No
Paragraphs	No
Alter text colour	No

Features	WordQ 2 / SpeakQ 2
Alter highlight colour	No
Thesaurus	No
Add new words to dictionary	Yes
Text window	No
Single word display while reading	No
Core dictionaries	Yes
Existing topic dictionaries	Yes
Create topic dictionaries	Yes
UK spelling	Yes
View and edit words/phrases in word lists	
Auto learn new words as you type	Yes
Learn new words, vocab patterns from text file or clipboard	Yes
Alphabetical	Yes
Frequency of use	No
Predicts ahead (grammar)	Yes
Flexible spelling guesses based on phonetic substitutions	Yes
Edit phonetic substitutions	No
Includes word definition	(for confusibles)
Includes homophones and confusables	Yes
Insert space after selection	Yes
Dynamic (follows cursor)	Yes
Vertical	Yes
Horizontal	Yes
Words	Yes
Phrases	Yes
Sentences	No
Paragraphs	No
Change font size	Yes
Change font colour	Manually thru windows
Change background	Manually thru windows
Adjust number of words in prediction window	Yes
Change size of prediction window	Auto according to text size
Click on word	Yes
Type number or function key	Only number
Previews word before selection on mouse hover	No
Previews word before selection on mouse click	Yes
Scans words in list before selection	No
Spell check as you type	Yes
Spelling lists	No
Add new words to user spelling list	No
Identifies and records error type	No
Search methods for identifying spelling errors	No
Phonetic substitutions	Yes

Features	WordQ 2 / SpeakQ 2
Add new homophones to list	No
Speech output	Yes
Create audio files from text	No
Speech input for writing	Yes
Set-up profiles for individual users	Yes
Collect, view and print spelling error analysis	No
Create topic dictionaries for word prediction	Yes
Add to dictionary definitions	No