

ESL Tutor: Educational Software for Improving English Skills of Students Who Are Deaf*

Dave Zenk
DPI
San Jose, California

ESL Tutor is a set of educational software programs developed to help college students, who are deaf or hard of hearing, improve their English vocabulary and writing skills. The product was called *ESL Tutor* because there is general agreement among educators of the Deaf that learning English is often a second language acquisition experience for many deaf children especially if their primary language is ASL. It has been in use in California community colleges for more than 10 years. In 1992, DPI entered into an agreement with the author to expand the program for the Mac system as well as to re-write the PC version to add user safety features. These development tasks are now completed and DPI has been distributing the programs throughout the US and Canada for about a year.

There are three independent programs in *ESL Tutor*. They are available as individual. The programs provide vocabulary training and contain exercises to improve writing. The Vocabulary Enrichment program contains more than 2200 words including English idioms. These words are defined using ASL gloss words. Parts of Speech includes a program to help deaf students understand and interpret English words that have multiple meanings. A group of 73 words having a total of 255 separate meanings is used. The exercises consist of:

- 1) Identifying the use of the word (its part of speech) in the sentence
- 2) Selecting the proper meaning of the word from a list of possible meanings based on their part of speech.

Finally, Grammar in Action is a program having of 530 short essays (paragraphs) which contain common writing errors. The student identifies the error and corrects it, proofreading the essay.

The first of these programs, Vocabulary Enrichment, contains more than 2200 words on 10 disks or modules. The program organization is described in figure 1 - *Outline for Vocabulary Enrichment*. Figure 2 - *Overview, Vocabulary Enrichment* shows the 10 modules divided into two groups - modules A through D and E through J. Figure 2 also describes the relationship of the lessons to the individual modules (the first four modules, A-D, have five lessons and the last 6, E-J, have three). A free demonstration disk of these programs is available from DPI (and was used in this presentation to illustrate the different features of the programs).

* This presentation was made in June, 1994 in Atlanta, Georgia at *Tools for Language: Deaf Students at the Postsecondary Level*, a PEC-sponsored mini-conference.

A major feature of Vocabulary Enrichment is that it provides out-of-class time exercises for students to practice their vocabulary. A second feature is that it has a "look and feel" that is appropriate to an adult user. Much of the educational software available today is written for younger children and many adult users may be put off by this. A third feature is that it is "results oriented" -- the student must learn the material to progress. Over the past ten years, the author gave pre and post tests (samples are included with the documentation of the program) to his students. Students who took these tests usually had comprehension in a range of 10-15% on the pre-tests and this improved to 90-95% on the post test after the student used this program. Regular follow-up with random groups of previously studied words helps ensure retention of the material.

The second program, Parts of Speech, is shown in *Overview, Parts of Speech*, figure 3. Figure 3 also includes a list of the words used in the demo disk. This program deals with the subject of multiple meaning English words like "back", "draw" and "just". Seventy three words of this type were chosen having a total of 255 different meanings. These words are also contained in module F of the vocabulary enrichment program so if the school has access to this program, the students may already be familiar with the meanings of the words. However the objective of this program is to give students practice with the strategy of finding the specific meaning for an English word with multiple meanings based on the way it is used in a sentence - its part of speech.

The Parts of Speech program does not *teach* the various parts of speech of English. But it does provide exercises that will support this classroom training in an out-of-class time environment that is stimulating for the students.

The third program, Grammar in Action, is discussed in *Overview, Grammar in Action*, figure 4. This program provides practice exercises consisting of short essays or paragraphs containing English writing errors common to deaf students as well as other ESL students. The student proofreads these essays, identifying the errors and correcting them.

There are four types of errors used in the program. "Articles" and "Verbs" have 175 essays each and "Word Choice" and "Suffixes" have 60 essays apiece. The fifth segment, "Combinations" contains a mixture of the above four errors in each essay. There are 60 of these essays as well for a total of 530.

Both "Articles" and "Verbs" contain rules which will appear on the screen when the student makes a mistake in correcting the error. These rules are included in the documentation as well as a list of suffixes and word choices contained in the program. A major objective of this program is to teach the students that proofreading their work is both essential and perfectly acceptable.

A demonstration disk containing examples for each of the above three programs is available from DPI at no charge. Both the PC (DOS) and the Mac platforms are supported. DPI is a California non-profit corporation with the mission to recruit, train and employ people with disabilities as computer professionals. Established in 1980, DPI has more than 250 people today.

The training program (DPI's mission) consists of two parts: a formal in-class education component and a work experience component in which the student participates in actual client related work supervised by DPI employees. In almost every instance, a job for the student results.

ESL Tutor offers an advantage to the mission of DPI by:

- 1) Providing a very effective work experience assignment for our students
- 2) Giving us the potential for jobs for the graduates of our program
- 3) Providing a product that serves the needs of the population of people with hearing loss

Figure 1

Outline: Vocabulary Enrichment

(Ten Modules)

	<u>Type of Vocabulary</u>	<u># of Words</u>	<u>Comments</u>
Module A	General Vocabulary	225 words	1 word meanings
Module B	General Vocabulary	225 words	1 word meanings
Module C	General Vocabulary	225 words	2 word meanings
Module D	General Vocabulary	225 words	2 word meanings
Module E	General Vocabulary	225 words	3 to 5-word meanings
Module F	Multi-Meaning Vocabulary	255 words	Covered in POS
Module G	Prefixes-Roots-Suffixes	150 words	Examples
Module H	Prefixes-Roots-Suffixes	225 words	Words
Module I	Idioms	225 words	1 or 2 word meanings
Module I	Idioms	225 words	3+ word meanings

Figure 2

Overview: Vocabulary Enrichment

Modules	<u>A - D</u>	<u>E - J</u>
Chapter Organization		
Lesson 1	3 groups of 5 words Study new word Give meaning (until correct) All 15 words Give meaning (until correct)	3 groups of 5 words Study new word Give meaning (until correct) All 15 words Give meaning (until correct)
Lesson 2	Fill in blanks with word bank (15 words) (until correct)	Practice Quiz Graded Not recorded
Lesson 3	Fill in blanks with word bank (15 words) (until correct)	Random Review Prior chapters
Lesson 4	Practice Quiz Graded Not recorded	None
Lesson 5	Random Review Prior chapters	None
Chapter test	Results recorded on disk Passing grade by teacher	Results recorded on disk Passing grade by teacher

Figure 3

Overview: Parts of Speech

Two lessons:

- 1 - How is the word used in the sentence?
- 2 - What does the word mean? (from several possible meanings)

Word list in demo disk:

<u>Word</u>	<u>Meaning</u>	<u>Part of Speech</u>
Back	Move to the rear	V.
Draw	Make happen	V.
Just	Exactly	Adv.
Draw	Get	V.
Run	Go through	V.
Back	Support	V.
Draw	Move	V.
Run	Spread color	V.
Back	Unpaid	Adj.
Draw	Close	V.
Just	Only	Adv.
Draw	Same score	N.
Run	Tear	N.
Just	Fair	Adj.
Run	Print	V.

Figure 4

Overview: Grammar in Action

Objectives:

- Identify error in essay:
- Correct the error

Types of errors:

- Articles
- Verbs
- Word choice
- Suffixes
- Combinations of above

Teacher management control:

- Easy to add or drop a student
- Teacher selects sequence of essays
- Student status and progress reports