

Design Parameters and Guidelines for Using the Online Computer Materials

Instructional Objectives

The primary objective of the materials is to encourage students to pay attention to details and to become accurate in their use of language elements. Two areas of language are emphasized: the correct spelling of vocabulary words with the associated definite article and, in some cases, the plural ending and the use of correct use of grammar elements - sometimes first in isolation and later in context.

A secondary objective is to encourage students to learn to use computers as a tool to assist them in their work.

Note: these materials are not designed as 'stand-alone' materials, but rather are designed to provide practice for concepts presented in the online instructional program or in a class and as such they do not contain grammar explanations.

Design Attributes

The design of these skill-building programs has developed over 33 years from practical observation by the author of his students as they work with the materials. The following elements have been designed into the programs:

The answer length has been kept relatively short, often less than 20 characters long, so that students would not have to type a lot of material.

The wait time between the completion of an answer and the presentation of the next answer has been kept very short since students want to move from one item to the next without delay. A brief statement indicates whether the answer was correct or incorrect.

The multiple choice option (with randomly selected distracters) is available for those students who need practice with less demanding material to help them gain self confidence and learn what is expected of them - see 'Using the 'MUL' or 'multiple-choice option' below for suggestions on how to use this option with different students.

The article option is available for those students who need to focus on the gender of a particular word; English-speaking students often overlook this element in the new vocabulary since it is not present in English.

In case of an incorrect answer several options have been provided for the students which include an option to *return to the item and retry*, an option to *view the correct answer*, an option to *get a hint* which shows which letters were incorrectly typed, and an option to *move directly on to the next item*.

The minimum number of items in a data program is twenty, but most grammar programs have between 25 and 35 items and vocabulary data programs average 35 to 40 items.

As a result students usually complete one time through a data program in less than 10 minutes.

The materials are also designed so that new elements are often presented in isolation or in a minimal contextual unit before they appear in a different data program in sentence contexts. This allows students to focus on the form and structure of an individual element

before they are also required to differentiate among several forms to select the correct one.

No provision for permanent record keeping is an integral element of this version of the materials; however, permanent records can be maintained if the 'Test Mode' is used and the student records his/her results.

These generic materials are designed to work well with any textbook. The vocabulary contained in these materials will have many vocabulary words presented in any text series, but the order of presentation will differ. The grammar programs can often be employed just as they are since they are often less dependent on a particular set of vocabulary words.

In the online materials each lesson from the syllabi for levels 1-3 lists the vocabulary lessons and also the new grammar practice exercises on which a student is expected to work. The grammar lessons only use words from the frequency-based vocabulary lists that have been presented up to that point so the student should be able to focus on the grammar element which is to be practiced rather than worry about what the vocabulary in the exercises means.

The author also has a computer-based set of materials (not the online materials) that are provided with an authoring/editing system which allows the vocabulary data programs to be edited to correspond with the materials in use in the local program. The teacher could thus customize the materials to meet the needs of the class.

Program Structure

The computer programs themselves fall into three main categories:

- a) the main programs which contain all the routines to manipulate the data elements; and
- b) the data programs or data files each of which contains a set of new vocabulary items, or is specifically limited to a structural drill of a well-defined grammatical concept (see online the Level 1 and Level 2 course overviews for brief descriptions of the contents of the various data programs).
- c) the data program authoring system, which allows the teacher to both edit existing data files and create new ones (only available in the stand-alone computer programs)

The online materials contain only the two main programs shown below:

- Vocabulary and Grammar Drills – the main learning program with several options.
- Selftest mode – a simple testing program in which the student types out the answer.

When a user commences the program, several menus appear on the screen in order. Currently, the user may select from four levels of German data and a first level of French and Spanish data. After this menu the user chooses one of the main programs, and then (s)he is requested to choose one of the data programs out of the list of data files for the language/level selected earlier. Once the user has selected the data program, he/she will have to select how the cue statements are to be presented through the Vocabulary and Grammar Drills program. After all the items in the data program have been practiced (or

when the F10 key is pressed), the user is given a choice of running the program again with the same or a different data file or returning to the main menu.

The 'Main Programs'

The Vocabulary and Grammar Drills program is designed to aid the student to learn new items and to practice and review older material. Under user control the program allows the user to practice material in a multiple choice mode, to write out the correct article to a German noun presented as the cue item, and to practice in a 'type-in-the-answer' mode which allows viewing the correct answer, rewriting an item, viewing a hint about spelling errors, and exiting to the next item.

The Test program tests students and provides corrective feedback at the conclusion of the test and an adjusted score on the test.

The prepared materials present coordinated lessons on grammar and vocabulary. The format of the data in the vocabulary lessons is always the same, and it is described in the section entitled 'Answer format for exercises' (see website).

In-class Strategies for Using the online Computer Practice Materials

These materials are most effective when used by one or two students working together at a computer in the classroom or individually outside of class. The ideal situation would be to have enough computers in the classroom for at least half of the class. In this situation the teacher could either have the students work in pairs and he/she could go around and help as needed, or the teacher could work with those student not working on the computer with other activities.

Where a number of computers is available or students have access to the online materials through the Internet, students may be given assignments, which they would complete outside the class time or whenever they have free time.

Using the 'MUL' or 'multiple choice' option of the Vocabulary and Grammar Drills program

Very early versions of these materials had no multiple-choice option, and some students became very frustrated with computer work because they could never write a correct answer. These students had never been required to be extremely accurate in their work and had not learned how to prepare themselves for such accurate work (occasionally the author has had students who had educational handicaps which made such detail learning much more difficult for them). The multiple choice option was added to provide an easier, computer-based practice option so that these students could experience success while at the same time they could be encouraged to start to focus on the details that the teacher wants them to learn.

For the weaker student the multiple choice option is the preferred option to use to introduce the student to computer work. The student should have been provided with a list of new vocabulary words and have been asked to learn these words - usually on their own. After the student has worked through a vocabulary list once or twice in the 'MUL' mode on the computer and has been reasonably successful (85% or above), the student should be encouraged to repeat the work with the multiple choice program, but to place a small piece of paper over the answers on the screen and to think of the answers before looking for them; this activity encourages students to begin to focus on the whole item. The next time the student works with the computer he/she can be encouraged to think of how the item is spelled and what the article of any noun is; now the student should focus on the details of correct spelling. Finally, the student can be encouraged to progress to the answer-writing routine and begin to practice writing the answers. Here the student can be motivated to look at the correct answer if he/she has forgotten the word, and to use the hint routine to determine which letters are incorrect. In this way a student can be encouraged to become more accurate and to pay more attention to the details of the language. The author has been very successful with this method of inspiring students with weaker study skills to become better learners and to raise their own expectations. For some of the more difficult Level 1 grammar topics - nominative and accusative data programs, practice with possessive adjectives, vocabulary lists with many plural endings - the multiple choice option provides an easier step for all students to be introduced to the topic and to see exactly what they will need to write down. After one or two practice sessions with the multiple-choice option they will be better prepared to write out the answer correctly.

Quick learners have sometimes used the multiple-choice option as a way to learn new vocabulary or even a new grammar topic. These students see the cue and answer for each item and are able to learn the items or deduce the grammar rules with only one or two sessions with multiple choice.

Although the multiple choice option was originally introduced only to assist students who were having problems with accuracy, it has become an important tool for all students to help them be successful with the more demanding answer-writing option.

Indicators of Success

Often one wonders if the work one is doing or the materials one is using are being successful, and success can be measured at many different levels. Is one successful when students with low self-esteem and weak study habits learn to be more effective students and continue on to the next level of study? Is student satisfaction as expressed on student surveys a reasonable indicator of success? Is one successful when one uses computer technology and other resources to provide an individualized instructional program for students who have special circumstances? In the author's program these elements all existed and also quite a high percentage of eligible students continued on to the next level of language instruction even at the advanced levels including students with greatly differing language skills. When I was teaching full-time, it was astounding to me that students who got a low 'D' or an 'F' at the third level still continued on to the fourth level; yet, I have had such students. These students generally had low grades because they did not complete the elements I required as part of the grade, not because they could

not do the work. In discussions with them, I found that they were indeed learning a lot of language material and were generally personally reasonably satisfied with what they had done even if their grade was not very high. On the other side of the coin, I also had students in my last few years who came to the advanced class with extensive prior language training, took one year to prepare for the AP exam, obtained a 5 on the exam and then returned to the class the next two years to continue to learn. One of the great strengths of this type of program is the fact that students with different language skills can find language-learning opportunities at their level of achievement. In the traditional program that I used to teach, the poorer students could not keep up and dropped out and the very good students were not challenged and also dropped out; now there is something for everyone.

Since 1984 – five years after the first computer programs were developed - about ten percent of the students with no prior background in German who take the National German Exam each year obtain a score over the ninetieth percentile and there were no such students in the ten years prior to 1984 during which time I gave the same national exam. In ten of the last sixteen years before I retired students placed from second to fourteenth in Northern California through this exam program. A few years ago I had a talented student who completed three years of German in two years, took the third level National German Exam and earned a score over the 90th percentile after just one and one-half years of study of German. In my last years as a full-time teacher I was able to encourage a very few select students to do substantially more work in the fourth year to prepare for the Advanced Placement examination and these students passed with 4's or 5's after as little as four years of high school German – a feat which my students had not been able to do prior to the availability of these computer-based materials. For all of these reasons I believe that the learning procedures I developed did indeed provide for the needs of the widely varying clientele. As improved computer technology has become more available to this clientele, I am migrating my classroom-based computer resources to the Internet to further augment the learning options for the students. Twelve years after retiring from full-time teaching, I now have my entire instructional program for four levels of German available through my website. Please make use of these highly successful materials and let me know how these materials work for you or send me questions.

Further Resources

A more detailed description of the author's instructional program can be viewed via the Internet on the author's website under 'German Courses - past and present':

web address: <http://99.23.170.17/~ramorrey/>

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