

Computer systems software support for foreign languages teaching

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Abstract – In this article the peculiarities of foreign languages teaching computer systems software are considered. The main types of programs are distinguished. The tasks of such kinds of programs are analyzed. The main objectives of these programs are pointed out.

Key words – computer systems, language teaching, software for language teaching, databank.

I. Introduction

It is known that the student during the studying process remembers only 30% of information that he sees; 10 - 20% of information that he hears, and 50% of information that he sees and hears. As a result, in modern educational systems multimedia methods for learning are widely used.

Application of multimedia in Computer Systems provides high foreign languages learning efficiency level. This is because of the fact that people have different memory types. For example some can memorize faster when information comes from visual devices (visual memory), other memorize faster when information is heard (audio memory), and other memorize when they write information (motor memory). Nevertheless, in large variety of cases these memory types are combined. Thus, the usage of different programs for language learning can improve the studying process.

II. Main part

The structure of such kind of software is based on general principles. Let us consider some programs building structures.

Initial training program is called script. This is a system of accurately identified and clearly fulfilled orders for the subject material teaching process implementation.

Usually such software is classified by:

- Functionality. (For what purposes do we need program?)
- Programming structure;
- Ability to adapt to the characteristics of trained person;
- The number and sequence of elements placement;
- Methodical goals and testing complexity level;
- Programs independence degree

By functional purpose the following programs types can be distinguished: educational, training, informational, control, game and combined programs.

Curriculum is academic information (materials), which describes the knowledge that is to be learned, skills, abilities, and ways of their formation.

Educational information serves for knowledge incensement. It is a recognizable set of objectively existing messages. In other words, educational information in the computer program is the set of different computer explanations, themes, objectives, guidelines, tasks, etc.

These programs can be used, when large amount of information is to be given in short period.

The main objective of the Training program is to ensure dialogue between computer program and student for the certain knowledge and skills acquisition. The purpose of Informational programs is to ensure a dialogue between computer program and student using notions from information bank. A single computer language data bank includes the appropriate phonetic, lexical, syntax, and grammatical databases. Informational programs are based on such databanks. The aim of Control program is to identify and correct learners' knowledge in the particular course topics.

The main Control program elements are tasks, control issues, variants of answers and other necessary elements for knowledge and skills level control.

These programs can be used to check how students have understood the previously given material and to give information about the necessity to explain some information one more time.

For example, they can be used to control the level of grammatical knowledge, or to control how students understand reading or listening tasks. It can be: Sentence completion, multiple matching, multiple choice question answering and "true or false" or "fill in the gaps" tasks.

In such systems, the student has to choose the right answer from several answers. With the help of this method, the level of the students' knowledge can be distinguished. It, in turn, helps to find the appropriate way of further language study.

Game programs can be subdivided into game programs based on the studied language material and situation-modeling programs.

Actually, these programs are rarely used in the teaching process. In most cases they are used for relaxation during the pause. However, Game programs can be used in the process of language teaching for active vocabulary consolidation or for creation of sentences with the help of differentiated words, etc. Situational-modeling programs are the most advanced in the foreign languages study.

With the help of these programs, quite complex lexicogrammatical topics can be learned. For example students can learn vocabulary, grammar and language use with the help of these programs.

The tasks can be: word formation, to find the appropriate similar or oppose meanings, to fill in prepositions, collocations, phrasal verbs, stable idiomatic expressions, which can be easily learned when are used in sentences in different situations and with the context.

In addition, these programs can include tasks on transformations, error correction, etc.

The usage of such programs is highly recommended at the advanced stage. It promotes different skills formation. In the learning process, the previously distinguished program types are usually combined. In Combined program information, control and game tasks are given in different dosage. By the programming methods, all

programs can be divided into three types: linear, branched and mixed programs.

Linear program is a program that provides the only direction of work path regardless of the nature of student responses to a control tests or questions. Linear program provides the studying process in which all students pass the same educational levels.

These programs offer students some modeled micro situations that conform to the training communicative orientation. Often in such programs, the methods of the so-called "fill in the gaps" are used. It means that student only fill in appropriate word or phrase in submitted structures.

Thus, learners are offered to write the appropriate form of personal pronoun and noun, which appear on the screen, missing words in a sentence that are to be inscribed with appropriate case, gender, ending, number, etc. There is no matter if student's answer is correct or not, the program will continue working. These programs can be used both for training and for controlling.

There are linear programs that provide the transition to the following task only if the previous task is done.

When the answer is wrong computer returns the learner to the original question one more time, gives the message with information about actions abnormality, or tips with explanation. Branched programs are divided into several types depending on the learner movement between the program levels.

It provides explanations that correspond to options that are entered and returns a trained person to the previous level or gives permission to go to the next one.

In these programs the issuing of information or training data usually depends on the number and character of students errors, and therefore of knowledge.

When learners input the wrong answers, the branched program gives out additional questions, or explanations are given out in order to help to find out the essence of the main questions and to give the right answers. There are two types of branched programs: externally and internally controlled.

In externally controlled, each following step is defined basing on statistics of previous learners' responses.

In this type of branched programs for the next step selection, computer statistical tools perform calculations in order to change the program depending on the aggregate of all trainees' responses. In the internally controlled program, the programmer defines the sequence of steps for advance.

Internally controlled programs are of two types:

1. Programs without redirection, which have one level of material statement and a set of additional steps.

When the incorrect answers to the question at some point of the main program level appears, the program offers the student to perform additional steps.

After the examining of additional material, student may return to the original phase. Depending on the material mastering quality, this process can be repeated several times.

2. Programs with redirection, which have several levels of material statement.

The choice of a level depends on the initial trainee knowledge.

Moreover, in the studying process, the students can move from higher level to lower and vice versa according to their knowledge.

Thus, strong students have the opportunity to learn academic material at a higher level, the weak ones at the lower level, which are specified by the program. Branched programs have varied structure that depends on the specific problems that are set by the program.

Mixed programs combine the features of linear and branched ones and, thus, provide great training flexibility.

These programs can be most successfully adapted to the individual demands and requirements of trainees.

Based on the mixed programs adapting programs can be created.

These programs are able to change the ways of educational material presentation depending on the external and internal learning conditions changing (the degree and speed of the previous material digestion, etc.).

Adaptive program has several variations of those or other, problems, issues and comments, recommendations, which are collected by the computer to complete and correct answers of trainees.

Adaptive program considers the knowledge and skills of learners in the best way, comparing with two other programs types.

For application purpose, several types of computer programs can be defined:

- Grammatical programs. Their aim is language grammar mastering
- Lexical programs
- Program for linguistic cultural studies;
- Phonetic programs that contain audio texts of native speakers, the phonetic rules of pronunciation testing, the unfamiliar language listening task;
- Communicational programs that organize work with the learners in the form of dialogue or dictation.

Conclusion

Application of computer systems software in the process of foreign languages learning and teaching provides high learning efficiency level.

The usage of adaptive programs is the most appropriate for all foreign language-learning stages. Thus, as one of the important principles of modern foreign languages teaching methods is the complexity principle. In order to reach the best results in the foreign language study the previously named program types should be used in package. It helps not only to learn the grammar, vocabulary and structure of foreign languages, but also to control the level of material understanding and memorizing.

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