

MULTIMEDIA, THE WEB AND FORMAL EFL EXAMS

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Abstract

Most CALL software available are material-presenting packages or sets of exercises and tests (or a combination of both). The article discusses two (author and co-author) examples of how computer technology can support real EFL exams:

- A multimedia CD-ROM package, “FCE”, that prepares for the *First Certificate in English* exam. The package contains more than 1,000 linguistic tasks, as well as two full-time simulations of the real exam.
- The “Multimedia Distant English Courses...” for Polish students of technical universities (within the *Leonardo da Vinci* European Union project). The student learns, practices and takes on-line tests and exams.

Background - Glottodidactic Software

Computer software supporting learning and teaching has a long history. Educational programs were popularized shortly after the introduction of home computers, for example Sinclair Spectrum, Commodore and Atari. The programs were usually single tests, small sets of exercises and/or short practical tasks for the learner. Their modest forms and content could be explained by limited memory and generally low capabilities of contemporary hardware. The scope and shape of educational programs changed and expanded with time, together with the rapid development of computer technology. During the last twenty years or more simple computer-based didactic tasks transformed into complex, multipurpose, multimedia packages.

Languages, especially English, were those “privileged” teaching subjects in humanities that were fairly well supported with educational software. It seems now that English as a foreign language (EFL) has the richest library of computer educational tools among all languages, if not all teaching subjects. This situation is rather natural: English has been an international language for years, first computers came from English-speaking countries. The status of English has been strengthened lately by the popularization of the Internet and WWW.

Are there many EFL computer packages available on the Polish market too? I think there are very many interesting programs. Unfortunately, they are badly advertised. Most ads

appear in popular-science magazines, e.g. CHIP, Enter, ComputerWorld. I am afraid they are not periodicals that are extremely popular among English teachers. A few years ago I started my own database which contained basic information about CALL (computer-assisted language learning) packages supporting EFL released in Poland. The database contains more than a hundred records now. This means that an English teacher or a learner of the English language has a choice of over 100 CD-ROM packages in Poland now. It is worth mentioning that many of them are sets of CD's. Some contain 6, 8 or even 10 discs ("Euro Plus+", "Tell Me More", Langmaster series etc.). However, the information about the programs came mostly from those popular-science magazines mentioned above. I am sure there are a lot more packages available on the Polish market.

What kinds of CALL packages do we find then? I would divide them into four groups: (1) multimedia encyclopedias, thematic guides, lexicons and other encyclopedia-type publications, (2) language courses, electronic books and different material-presenting software, (3) language games, learning-through-entertainment software, and (4) programs checking the learner's knowledge or skills: collections of exercises and tests. The first group comprises mostly encyclopedias (e.g. Britannica, "Microsoft Encarta", "Microsoft Bookshelf for Windows", Hutchison, Grolier) and dictionaries (e.g. Collins Cobuild, Webster, Oxford). The second group is represented mostly by recognized EFL courses published previously in the traditional, paper form, now transferred onto an electronic carrier, CD-ROM. The packages are, of course, supported by exercises and tasks that make use of the computer's capabilities, and would be hard or impossible to provide traditionally, on paper (e.g. "Euro Plus+" based on the "Flying Colours" series by Heinemann). The third group are either games which contain some educational content (e.g. "All-in-One Language Fun") or educational packages supplied with some entertaining elements (e.g. "Lingualand"). The fourth group comprises programs which describe and test selected grammatical, lexical or phonetic issues (e.g. "Professor Henry" series, "Fonetyka w pigułce"). Large collections of exercises and tests also belong to this group (e.g. "PopEnglish", "ETeacher").

In the discussion on different CALL applications, we cannot forget about the Internet. I would distinguish two types of language teaching/learning aids here: educational webpages and web-based CALL software. There are hundreds or thousands of EFL WWW pages. Let us systematize them now:

- homepages of educational publishers known from their traditional, paper production: coursebooks, periodicals, books (Longman, Cambridge Press, Collins, etc.);
- pages by editors of dictionaries and encyclopedias (Webster, Oxford, Collins, etc.);

- homepages of traditional and virtual educational institutions and organizations: universities, colleges, schools, courses and other forms of formal training;
- educational (e.g. EFL) portals;
- homepages of commercial and non-commercial educational software publishers;
- websites – collections of traditional teaching and learning materials: different tests and exercises, English literature in the original or adapted to instructional needs, sets of language tasks for language improvement and many other teaching/learning aids;
- so-called private pages: websites designed by individual, informal, not institutionalized WWW users: educators, teachers, students and hobbyists. Many of those represent a very high professional standard.

Web-based computer software are programs located in the Internet. They are operated remotely from the individual user's computer screen. They should not be confused with downloadable software that is located on the web. These programs, when downloaded and installed, work locally from the user's hard disc. The best examples of remote (web-based) CALL software are on-line dictionaries, encyclopedias and glossaries. On-line language courses belong to this group too. Connecting with such a page activates a special remote program which guides the user through the course, presents material, runs exercises, displays results, and performs many other organizational tasks.

Summing up, almost all CALL programs support the process of learning and teaching. The teacher receives tools that can be incorporated in the classroom along the language course. The learner can use different programs individually in order to improve the general knowledge and skill of the language, or work on selected linguistic issues. Thus, CALL packages are teaching/learning aids, additional to all sorts of traditional materials.

Very few computer applications are designed for formal examination use. On the other hand, very few existing formal, official language exams make use of computer technology, in Poland too. One of the reasons is that software developers and producers are not willing to get involved in special-purpose computer applications for marketing reasons. However, I believe the market response to such software production could be quite positive, at least in the case of common, official or state exams. For example, a program preparing for "matura" (secondary education final exam), or English Departments entrance exams at Polish universities, would sell quite well.

EFL exam on the computer screen – a local example

It is generally known that using teaching aids and materials in addition to the basic textbook along the course of a foreign language is a highly preferable activity. Similar dependence takes place on the side of the learner. The student can improve the process of learning by using different additional tools and materials, including computer software. In the case of a general English course the situation is rather comfortable, because the variety of different programs available is very wide. It is much worse in the case of real formal exams. Such packages are hardly ever produced.

An example of such a package I would like to describe briefly refers to the worldwide known examination, *Cambridge First Certificate in English*. The exam is very popular in Poland, and its popularity is growing year by year. FCE exams are performed by local agendas of the British Council in several cities and towns in Poland (more information is available directly at <http://www.britishcouncil.pl/education/polfce.htm>, the website of the BC Polish branch). The package I am introducing holds the same name, “FCE”, and has been produced by SuperMemo World, a computer company in Poznań, Poland. More information about the package can be found at <http://www.supermemo.pl/index.php?page=21160> .

This is a multimedia package on CD-ROM which prepares for the FCE exam mentioned above. It is neither a textbook nor an English course – it is a huge collection of exercises and linguistic tasks which can help the user estimate his/her linguistic competence and skill in the context of the FCE exam standards. The package contains over 1,000 tasks similar to those the user can expect at the real examination. The word *similar* is used here intentionally – one should not expect exactly the same questions. However, I have tried to make all the tasks as close to the original ones as possible, both in content and form. Hence the package “brings” the user much closer to the real exam tests than most or even any other preparatory, computer-based materials.

The linguistic content is based on both formal and colloquial English on the intermediate level. The exercises are divided into five groups according to the division of the original exam into the following parts: Reading, Writing, Use of English, Listening and Speaking. The groups are comparable in size, which means that the user can expect about (or a little more than) 200 questions and tasks in each group.

The huge collection of exercises constitutes the main part of the program, however, there is another powerful feature of the “FCE” package: exam simulations. This is a separate module which contains two simulations of the real FCE exam. Here, the user is given

questions to answer, problems to solve and tasks to do in the same sequence and similar form. The time is limited and the user is given the score after completing the whole exam. This part of the package is quite exceptional when compared with other EFL multimedia production. Presumably no other program available in Poland, or elsewhere, does the two things at the same time: prepares and tests exactly for a specific exam, and simulates it.

A crucial question in this discussion is the reliability of the simulation, to what extent it is possible to imitate real class situations, whether all the examination tasks can be performed via the computer screen effectively, whether the final grade is representative, etc. First, let it be stated clearly that “full” computer simulations of face-to-face situations are hardly possible. Even the best, the fastest and the most capacious modern computers cannot handle a natural discussion. The situation is similar with open questions. The longer the student’s utterance is, the more difficult it is for the machine to assess it. Thus, there are parts of the exam that cannot be simulated by the computer by any means, e.g. essays. The computer can check spelling quite easily, though it is much harder with grammar, or almost impossible with style. It is far beyond the computer’s capabilities to take a position on the student’s metaphors, wit, irony or meta-language. One can hardly imagine a situation in which the computer could replace the examiner in the Speaking part of the exam.

The Reading part is rather easy to simulate. Even if the text is too long to fit the computer screen, the user can scroll it in a separate window and answer the given questions. The Use of English is probably the easiest part to be adapted to computer-based exercises – it checks grammar, syntax, vocabulary, word collocations and other elements which can be *atomized*, i.e. presented on the screen in the form of short questions and answers. The Listening part can also undergo certain atomization. First, the student listens to the whole of the text. When specific questions appear on the screen, the user is given opportunity to play back the part of the text the question refers to, usually two or three paragraphs. This portion is short enough to draw the user’s attention to the issue, and long enough to mask the issue in question. Speaking had to be atomized because performing a real conversation with the computer is still technologically impossible. The student is given a question and then asked to answer it aloud. Then a number of alternative answers are displayed, and the student can compare his/her response with the suggested ones.

The same method of comparison is used in Writing, the most difficult part to simulate. The student’s task is to write an essay. First, the title is given and a more detailed explanation of the task. Then, specific instructions of how the task should be performed are displayed, together with the very detailed criteria of how the essay will be evaluated and assessed. The

student is asked to write the essay on paper, read it again and compare the essay with a model answer. A model essay is displayed on the next screen. The student is then asked to grade him/herself according to the grading scale given before. It is enough to click on the appropriate button on the screen: “excellent”, “very good”, “good”...

One would say the reliability of the test suffers when students grade themselves. This is true, however, the dilemma is whether to include such an element (being aware of its limited reliability), or to exclude the whole part from the simulation. The former solution seems to be good compromise. Nevertheless, we are considering hiring a tutor. The user could send in the texts electronically, the tutor would correct them, and the learner would receive them back with some additional comments.

The learner can use both the simulation and the main parts of the package repeatedly. After the simulation is completed, a report is displayed which then can be saved on disk for future reference. As for the main parts, each answer to single questions is recorded by the program. Then the computer calculates the so-called forgetting curve, and plans in time repetitions of unanswered or wrongly answered items.

The main types of activities in both simulations and main parts of the package are:

- multiple choice test (one correct choice out of three or four);
- filling blanks (missing word or phrase in a sentence);
- matching exercise (drag-and-drop technique);
- pointing the appropriate element on the screen (e.g. “click on the person’s forehead”);
- indicating the incorrect element in a sentence;
- descriptive tasks which require longer utterances, exemplified by model answers and possible alternatives.

Almost all texts that appear on the screen have been recorded by native speakers. The user can play them back freely at any time.

Both the simulations are time limited, they are 3-hour versions of the test. In my opinion they can help the student feel the climate of the genuine FCE exam. I also believe that people who prepare to the exam individually can benefit from the package as well as those who attend official preparatory courses.

EFL course exam – a remote example

The computer screen, or rather its working area, is called “Desktop”. The term is indeed accurate: the user arranges this area with most frequently used tools, just like on a

regular desk. The computer desktop presents them in the form of icons. The icons are actually shortcuts to programs installed on local drives, to documents or folders, as well as remote applications located “somewhere” on the web.

Formal web-based instruction takes usually two forms: (1) there are virtual educational institutions which function totally on line, (2) some “traditional” schools and/or universities offer selected courses that can be available electronically, in the Internet. They are often specialization courses or courses for special purposes, integrated projects, or single subjects performed remotely – foreign languages including. I would like to present an example of such a virtual, remote EFL examination application.

The EFL platform I will discuss briefly belongs to the Leonardo da Vinci Project performed under the aegis of the EU. Generally speaking, it is a multi-module course dedicated to students of Polish technical universities. The course covers some specialized subjects, technological issues, and is provided in English only. The full name of the program is „Multimedia Distant English Courses for Polish Users in Legal, Banking and Finance, Science and Technology, and Safety Training Sectors with Elements of European Union Regulations and Standards”. The venture is a result of co-operation between two Polish technical universities: Poznań TU and Gdańsk TU, and the University of Wolverhampton, Great Britain.

“The Leonardo da Vinci (LdV) is one of the three education programmes of the European Union implemented in Poland which contribute to the implementation of its vocational education and training policy. The overriding aim of the programme is to promote activities focused on upgrading the quality of VET systems and adapting the system of education to the labour market needs. The programme provides a framework for transnational cooperation in the sphere of raising quality, fostering innovation and promoting a European dimension in vocational education and training systems, approaches and practices.”

The above definition comes from LdV materials. More details are available at <http://www.bkkk-cofund.org.pl/>, the site of the Polish Agenda of the program – “The Task Force for Training and Human Resources”. The largest source of information about LdV can be found at http://europa.eu.int/comm/education/leonardo/leonardo2_en.html.

As I mentioned above, the course is dedicated to Polish students, though provided in English. A general idea of the project design was to join the content-related issues with the communicative aspects. The objective of the course is to train the student in specialization subjects on the one hand, and to check the student’s linguistic competence on the other. I am a co-author of one of the modules.

The *Internet Technologies Module* (P. Topol, A. Adamczyk) takes a special position in the whole course because it covers the issues which should constitute basic knowledge of the Internet among students of any technical school. Therefore, this module has been made obligatory for all the students undergoing any of the specialization modules. Here is the list of most of the issues discussed in the ITM:

- standard Internet services (electronic mail, telnet, ftp, discussion groups, irc, gopher, www);
- advanced services (video on demand, audio- and videoconferences, distant education, e-commerce, e-banking, ip telephony, push channels, portals and vortals, etc.);
- internet services and browsers (Microsoft Internet Explorer vs. Netscape Communicator, off-line browsers and Teleport Pro);
- html and additions (server-side additions, client-side additions);
- authoring tools for the www (programs for graphics authoring, programs for music authoring);
- intranet – practical issues (creating and managing resources);
- technologies and tools of the intranet;
- security issues (network security, information encryption).

The student reads portions of information on a few screens and then does exercises. Each fragment (chapter) is provided with tests, and there are additional exercises and tasks at the end of the whole module. There are different types of manual tasks, e.g.:

- different forms of multiple choice test: pointing the appropriate answer with the mouse, clicking on the correct element (checkboxes, radio-buttons), selecting the answer from a pull-down menus (classification of correct answers);
- filling gaps: writing words or phrases;
- matching (drag & drop technique): two columns of items, hierarchy, ordering.

There are also problem-solving activities. The first screen of such an exercise introduces a short text to be displayed on the next screen, and presents some keywords, key phrases or key issues the student should pay special attention to. Then the full text is displayed which never exceeds one computer screen. The student reads the text without time limits. The third screen shows the correct answers and gives some supplemental information and/or comments. Sometimes screen 3 contains additional tasks for the student and the answers are given on screen 4.

Many exercises are supported by audio recordings performed by native speakers. In some exercises the student listens to a text first and then writes the answer. There are many exercises where the student can check the pronunciation having given the answer in the written form. The main texts in the module have not been audio-recorded because of technical and organizational reasons. This issue is being discussed now, they may be recorded in the next edition of the project.

The student's answers in exercises and tests are checked automatically by the computer in most cases. One of the main goals of the project design was to make the process of student assessment possibly highly automatic. There are situations, however, where some corrections have to be made by a tutor or a person monitoring the student's progress.

The Leonardo webpage can be entered in two ways: as a student and a tutor. The student is allowed to look through the course and perform tasks. Each time an answer is given, the student is informed about its correctness immediately. The student can go through an exercise more than once, then the computer stores the results for each take respectively. The tutor can monitor the learners' achievements: which student completed which tasks with what result. The tutor can browse all the student's answers, comment on them and also make corrections to the grades given by the computer. This last feature has been added in case an unpredictable factor occurs, and a "manual" correction or assessment will be necessary.

Each module is supplied with some additional tools: chat, calendar and discussion group. Students can chat both with other students and tutors. The calendar functions as a mutual reminder of events, terms, due times, etc. Both tutors and students can add to the calendar. This refers to the discussion group too. All the tools are internal parts of the system. They are available only for those who have logged in to the server. Logging is authorized and password-checked.

The student completes the course and a final grade is calculated. All the student's answers along the module are taken into consideration: both from intra-tests attached to each chapter and from the final tasks. The final result is actually a compound of the student's professional preparation as well as linguistic competence. Thus, LdV is neither a strictly technical course nor a typical EFL project – it is a combination of both.

Conclusion

Both examples described in the article were put in practice in 2001. "FCE" met with positive reviews in popular magazines. It was among a few packages that received an award

of the “Product of the Year 2001” in the category of educational computer software, granted by the “CHIP” magazine. The market response to the package is also optimistic. However, no research has been done on its actual usefulness, i.e. if it really proved a value for those who used the package for their own practice and then took the FCE exam. I am considering a survey that would gather such opinions. There are obstacles, e.g. how to reach those people, though the Internet might be the right tool to perform such an investigation.

The latter example, the LdV system, received positive reviews too. It was tested by students of Technical University in Poznań. The project is by all means successful, however, there are elements both in the system and the courses that need improvement. It is worth mentioning, however, this was the first phase of the LdV program. Now we are looking forward to its second edition.

To conclude with a general remark, EFL examinations seem to be a forgotten or neglected area on the computer market. Software developers and producers concentrate mostly on general language courses or multi-purpose sets of exercises. The projects discussed in the article show that supporting foreign language examinations by computer technology can be beneficial for both parties: those who take exams and who organize them.