

An Interactive Database “English for Ecologists” as a Key Element of Motivational Stimulus

Miglė Ginaitytė

Abstract. The real area of interest for classroom practitioners nowadays is not so much the nature of ‘motivation’ itself, but the variety of different techniques or strategies that can be employed to motivate students. To create language classes more inspiring, to supplement dull teaching material innovative lecturers should start using new tools in their daily lives. To demonstrate how this could be achieved the author of the article exploits her own original database (virtual learning environment) “English for Ecologists”, as a model, specially created and designed by the author at Blackboard vista WEB CT platform for Vilnius University Ecology students to help them consolidate the skills learnt during the lectures and to prepare them for the final examination at the Faculty of Natural Sciences.

The aim of the article is to explore and present the virtual learning environment (VLE) and to show its adaptability research results, which suggest that VLEs specially oriented and relevant to particular learners act as a key element to motivational stimuli. To reach this aim the following research objectives have been set: 1) to give a short overview of the motivational stimulus theories; 2) to present the structure and the idea of the VLE; 3) to analyze the respondents’ results and viewpoints about the VLE and to show how this creates a motivational construct.

The results of the questionnaire distributed to the users of the VLE reveal the questions of novelty, practicality, interest and problems using the programme. The research demonstrates that students show a great interest in using this new self-study tool in their daily lives for consolidating their English skills and checking their progress autonomously. It is concluded that the research data made it obvious that databases (VLEs) presented in the article are ideally suited for the present day technologically-minded students who are inquiring, demanding, striving for perfection and prone to innovations. With the help of modern technologies teachers can create the learning environment more stimulating and satisfying not only for their students but also for themselves.

Key words: *stimulus, interactive, motivational construct, autonomous learning, blended learning, technogeeks.*

Introduction

Motivation is one of the keys if not the most important one to successful learning. Maintaining the level of motivation during a period of language learning is one of the best ways to make the whole process more successful and is a challenge that presents itself year after year even to the most experienced teachers working with different ages of students starting from primary classes to universities.

The topic of motivation has been greatly researched over the past decades from different domains and contexts. Research on motivation in second language learning has been greatly influenced by R. Gardner (1985), R. Clement (1980, 1986, 1994, 1996) and their colleagues in Canada, J. Schumann (1978, 1986), E. L. Deci and R. M. Ryan (1985), G. Crookes and R. Schmidt (1991) and other scholars. Nowadays this topic is widely analysed by the professor in psycholinguistics Z. Dörnyei (1990, 1998, 2001, 2003). In Lithuania this topic is widely discussed by D. Beresnevičienė (1995), G. Butkienė and A. Kepalaitė (1996), M. Teresnevičienė (2004) and others. The past findings of motivation can greatly benefit teachers in their day-to-day classroom practice.

However, the real area of interest for classroom practitioners nowadays is not so much the nature of ‘motivation’ itself, but the variety of different techniques or strategies that can be employed to motivate students. It is obvious, that the frantic pace of life we live in dictates new standards of teaching and innovative teachers should try to create language classes more inspiring with the use of the latest technologies and distance learning courses. Blended learning usually supplements boring face-to-face teaching material and is a stimulus for motivational construct. To demonstrate how this could be achieved the author of the article exploits her own original database/virtual learning environment (VLE) “English for Ecologists”, as a model, specially created and designed by the author at Blackboard Vista WEB CT platform for Vilnius University Ecology students to help them consolidate the skills learnt during the lectures and to prepare them for the final examination at the Faculty of Natural Sciences.

The aim of the article is to explore and present the structure and content of the database and to show the research results of its adaptability, which suggest that databases specially oriented and relevant to particular learners act as a key element to motivational stimuli. To

reach this aim the following **research objectives** have been set: 1) to give a short overview of the motivational stimulus theories; 2) to present the underlying idea and the structure of the VLE; 3) to analyze the respondents' results and viewpoints about the VLE and to show how this creates a motivational construct.

The sample and the research methods

The sample. The survey was carried out with 25 first year Ecology students at the Faculty of Natural Sciences at the beginning of the spring semester. These students were the first ones who had the possibility to evaluate the database because it had not been implemented before. The sample was not big, as each year there are only about 30 students of this speciality.

The research method – survey. Ten open and closed questions in a form of a written questionnaire were given to the students which explore the aspects of novelty, practicality, interest and problems using the programme.

An overview of the motivational stimulus theories

J. Schumann in his book “The Neurobiology of Affect in Language” argues that second language acquisition is primarily emotionally driven and emotion underlies most, if not all, cognition (Dörnyei, 2001). The key constituent of Schumann's neurobiological theory is stimulus appraisal which leads to an emotional and consequently to a behavioural response. Schumann postulates five dimensions how stimulus appraisals are made:

- Novelty (degree of unexpectedness/familiarity);
- Pleasantness (attractiveness);
- Goal/need significance (whether the stimulus is instrumental in satisfying needs or achieving goals);
- Coping potential (whether the individual expects to be able to cope with the event);
- Self and social image (whether the event is compatible with social norms and the individual's self-concept) (Dörnyei, 2001).

Another successful emotional construct is presented by J. M. Keller (1983). It is a four-component system that was adopted by G. Crookes and R. Schmidt and their framework consists of four components as given in Z. Dörnyei's book (2001):

1. Interest is related to intrinsic motivation and is concentrated on the individual's inherent curiosity and desire to know more about himself or herself and his or her environment.
2. Relevance refers to the extent to which the student feels that the instruction is connected to important personal needs, values, or goals. At a macro level, this component coincides with instrumentality; at the level of the learning situation, it refers to the extent to which the classroom instruction and course content are seen to be conducive to achieving the goal, that is, to mastering the L2.
3. Expectancy refers to the perceived livelihood of success and is related to the learner's self-confidence and self-efficacy at a general level; at the level of the learning situation, it concerns perceived task

difficulty, the amount of effort required, the amount of available assistance and guidance, the teacher's presentation of the task, and familiarity with the task type.

4. Satisfaction concerns the outcome of an activity, referring to the combination of extrinsic rewards such as praise or good marks and to intrinsic rewards such as enjoyment and pride. (Dörnyei, 2001)

One more crucial aspect which many believe to be the most important ingredient of motivationally successful teaching is ‘enthusiasm’ from both the teacher and the learner, as given in J. Alison's book (1993) “Motivating reluctant language learners in Key stage 4”. The author demonstrates how a motivating teacher establishes a relationship of mutual trust among the learners and builds a motivational construct. It is obvious, that teachers' values, beliefs, attitudes and behaviour, as well as the general level of their commitment towards the students, their learning and the subject matter, constitute some of the most prevailing influences on student motivation. E. L. Deci et al. (1997) emphasize, the relationship between teacher and student motivation as an interactive one that can be either positively or negatively synergistic.

“Yet, the fact is that teachers are the designated leaders of the class groups and therefore they have a special responsibility for maintaining their own commitment to the teaching process. If they abandon this responsibility, this will result in their ‘psychological absence’ from the teaching process, which is the fastest way to undermine the motivational base of the learners.” (Ryan and Deci, 2000)

Students develop abiding interests in certain domains of knowledge. It might be worthwhile to incorporate your students' interests into your curriculum, as well as to offer students choice options that allow them to pursue their interests.

“Researchers who have studied the role of interest in learning have found that students sustain their attention more continuously and process information at deeper levels when they have a personal interest or investment in the knowledge domain.” (Brophy, 2004)

These days technology is usually that interesting domain which is also a natural and integrated part of students' lives offering excellent opportunities for collaboration and communication, new ways of practicing language and assessing performance. A computer is some kind of virtual teacher or at least taking the place of the teacher for some functions at some times as given by Ken Beatty. Nowadays even different software programs are named as a virtual teacher, a teacher's helper, a guide, an instrument, a teaching tool or a learning tool. It is vital to emphasize that all the latest technologies give a direct path towards autonomous learning, which is greatly beneficial. The assumption that it is vital in the learning process is partly rooted in the principles of humanistic psychology: “the only kind of learning which significantly affects behaviour is self-discovered, self-appropriated learning” (Benson, 2000), and partly in educational psychology, which has stressed the importance of learning strategies and self-regulation.

It is essential to underline that the changes in the way people learn languages, dictate new requirements and competences for the contemporary teachers. Motivating teachers need to show their dedication and passion in what they are doing, they should be striving for perfection, constantly learning and interested in ground-breaking issues. The use of technology in the foreign language classroom is becoming increasingly important and is one of the skills which should be learnt by innovative teachers aiming to achieve better learning quality and motivating environment.

The idea and structure of the database

Nowadays distance learning includes learning via technology such as the Internet, CD-ROMs and mobile technologies (Dudeney, Hockly, 2008). If distance learning is conducted via the Internet it is called online learning. Online learning is usually delivered via the learning 'platform' or Virtual Learning Environment (VLE) on which course content can be stored (Dudeney, Hockly, 2008). Nowadays different platforms are very popular such as: Moodle, Blackboard, First Class, Web CT. Course designers can include not only documents, but also video, audio files, visual aids, prepare quizzes, questionnaires, tests and use communication tools like discussion forums. Newer VLEs even integrate blogs and wikis. Most VLEs provide tracking facilities giving the tutor the possibility to see who has logged in and when, the activities the learners have done, what documents they have accessed, what result they have achieved while doing the programmed tasks on the platform. They provide sophisticated tools for assessment and grading, with records for every learner and a 'grade book' for automatically graded activities.

The idea to create the original database/virtual learning environment (VLE) oriented to Ecologists was triggered for the need to have the compiled material about Ecology in one place. Due to the fact, that not all publishing houses agreed to give permission to use their exercises in the VLE, the initial idea was changed into creating a set of exercises for consolidation of the skills learnt during the lectures. The exercises presented in the VLE also help students to prepare for the final English examination at the Faculty of Natural Sciences. The self-study virtual learning environment at Blackboard Vista WEB CT platform consists of five basic parts (each subdivided into smaller sections): grammar (thirteen parts), vocabulary (eight parts), speaking and reading (nine parts), listening (twelve recordings), and writing (six parts). There is also a brief introduction of the VLE to introduce the future learners with its goal and principles. All the parts used there were carefully selected and linked with Ecology and Environment. To design it more stimulating for Ecologists visual material, quotations and audio files were added to bring Environmental topics true to life. Students can test themselves and monitor their progress, improve their skills and discover their weaknesses. The VLE is a wonderful tool not only for the learners, but also for innovative and creative lecturers who want to be more objective in evaluating students' skills, as it gives the possibility to monitor the progress and to communicate with the learners. The task of the lecturer who has his or her online distance

course is also to check the open task questions and to be willing to adapt the future tasks for the students' needs.

It is important to emphasize that sometimes teachers and institutions who get involved in online learning do not realize that "online learning is not a cheap and easy alternative to face-to-face learning" (Dudeney, Hockly, 2008). The more effective the course is, the more time it has been given for developing and programming stages. It is really not the cheap alternative that many people consider to be as development and tutoring costs for online courses can often be many times higher than those for more traditional ones. If the lecturer is not a "technogeek" to implement an interactive database for the specific learners might be very problematic and high-priced.

The analysis of the respondents' viewpoints about the database

The research results show that the majority of students (88 %) are not familiar with interactive virtual learning environments and the ones who have used them indicate that they were not interactive. 12 % of the students used Biology and Chemistry non-interactive databases.

Students show a positive attitude towards the VLE "English for Ecologists" and believe that it will greatly benefit for their future examination (Figure 1). We can notice that the majority of students strongly agree or agree with this idea and there are no negative answers. This may indicate that the users have extrinsic motivation, the material is relevant, they feel satisfied and the coping potential is strengthened. Practically all students (96%) find the tasks in the VLE stimulating and motivating, which may be the implication that their intrinsic motivation of enjoyment in doing the tasks is satisfied. The general evaluation of the VLE is very good according to the respondents as given in Figure 2. There are no negative answers in the research results.

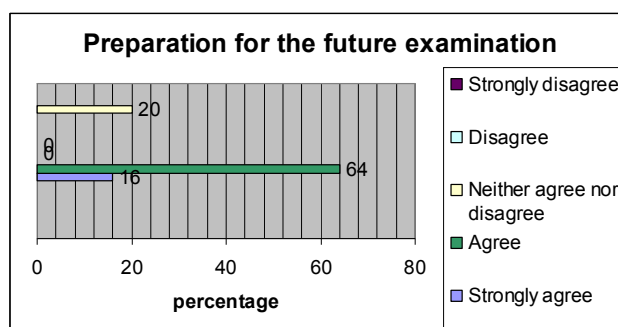


Figure 1. Do you think that the database/VLE "English for Ecologists" will help you to prepare for the final examination at the Faculty of Natural Sciences?

Mainly all the respondents agree that listening (Figure 3) is the most useful part in the VLE. Grammar and vocabulary parts are also indicated by some learners as being very useful. Students find the listening tasks and recordings very stimulating as they are all connected with their speciality and give a possibility to check their comprehension. Respondents lack this skill because while listening to or watching some specific ecological recording or video on the web or television they are not certain if

they understand the presented information, as their listening comprehension is not checked. Meanwhile, the ones who find vocabulary tasks stimulating pinpoint the importance of specific lexis and its consolidation apart from lectures. Grammar tasks seem to offer much repetitive work in self-access mode. It is essential to note that half of the students find all the sections of the VLE beneficial for them (Figure 4), which suggests that they must be really involved in doing the tasks which are stimulating. The ones who find writing, speaking and reading tasks not involving indicate that these skills are difficult to test via the Internet. The ones who indicate that listening is the least useful had a problem with media player or java installation.

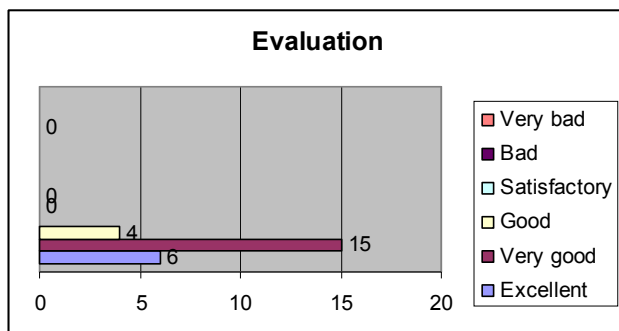


Figure 2. What is your personal evaluation of the VLE?

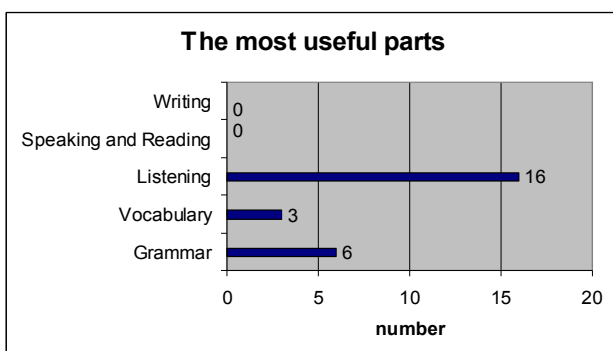


Figure 3. Which part of the VLE do you find the most useful?

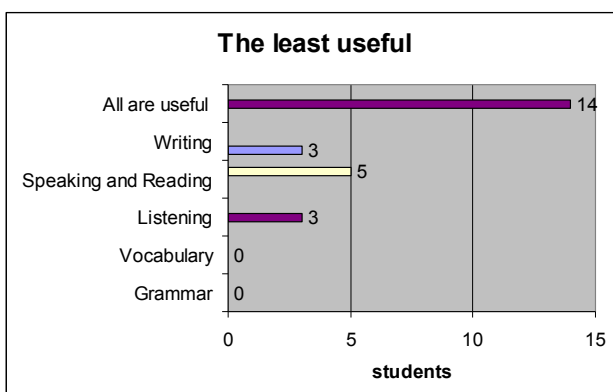


Figure 4. Which part of the VLE do you find the least useful?

The research also exploits students' expectations towards the database, as it is necessary to meet the learners' needs, likes and learning goals if you want to build up a motivational construct. In this question the students had a

possibility to choose several presented options and could indicate their own needs. Most of them emphasized video films about ecology with special tasks for comprehension and exam samples. Songs with discussion questions, model presentations, extra books for home-reading were not dominating answers (Figure 5). However, one student indicated that it would be useful to have grammar rules included in the database.

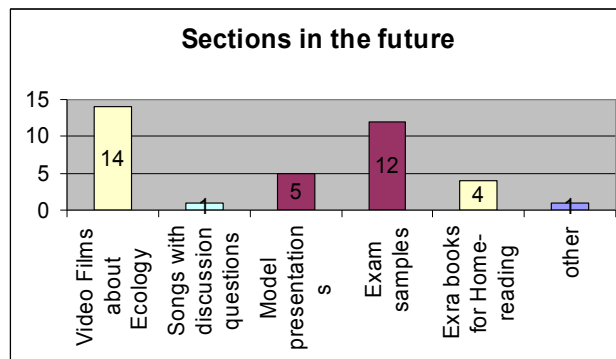


Figure 5. What would you like to find in the VLE in the future?

Despite the fact that the respondents are digital natives (people who grow up with technology and feel comfortable and confident with it) they do not show enthusiasm in checking their knowledge through the online databases / VLEs for getting a grade. 40% of the students would not like this idea, 28 % do not have an opinion and only 20 % would like having online tests for getting a grade (Figure 6). The reason is simple: they understand the importance of VLEs for their learning process, but not for the final result (a grade) as they understand the complexity of test designs. They indicated that tests would be limited just to several types of questions and many skills could not be tested. The users of the VLE are also afraid of technical problems which are prevailing everywhere on the Internet. 64% of the users had a problem of using this specific database selecting the problems of java installation (62,5 %) and losing the scores (37,5 %). Thus, this might also be the answer to the question why the majority is reluctant to use databases / VLEs for the final evaluation.

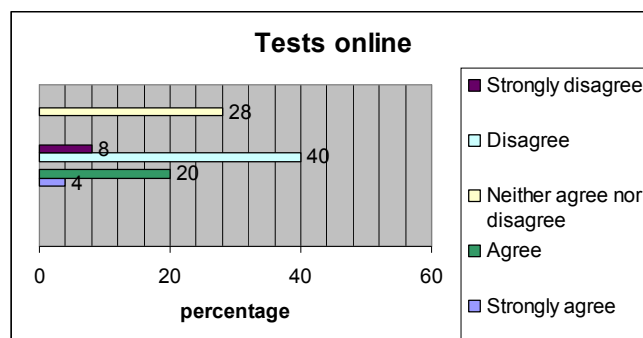


Figure 6. Would you like to get some tests to check your knowledge and skills during the lectures through online database/VLE in the future?

Conclusions and recommendations

- Computer-based material for teaching is ideally suited for autonomous learning and building up a

motivational stimulus. Usually, learners using the *www* lack the clear direction and can often become distracted and lost in the enormous sea of information. Obviously, distance learning courses oriented to the particular learning groups and needs are usually well-structured and highly directive, giving the possibility to assess the ongoing teaching process.

- The research revealed that students show a great interest in using this new self-study tool in their daily lives for consolidating their English skills and checking their progress autonomously. The research data made it obvious that databases / virtual learning environments presented in the article are ideally suited for the present day technologically-minded students who are inquiring, demanding, striving for perfection and prone to innovations. With the help of modern technologies teachers can create the learning environment more stimulating not only for the students but also for themselves.
- The research findings lead to some practical recommendations that can be made:
 - 1) the curriculum that comes from university should be modified and individualized to some extent to include student-centered learning and teaching according to the students' needs. This means that every teacher has to adapt his or her methodology and materials to the learner. As a solution, interactive virtual learning environments are recommended for enthusiastic teachers who help to motivate students and sustain interest in learning.
 - 2) It is obvious, that if you have got a class of "technogeeks" (technology enthusiasts) or digital natives (people who grow up with technology and feel comfortable and confident with it) you should

really try to make use of it with the latest possible technologies.

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Virtualioji mokymosi aplinka „Anglų kalba ekologams“ – motyvacinė paskata

Santrauka

Šiuo metu pagrindinis dėmesys kreipiamas į įvairius metodus ir būdus, kurie motyvuoja studentus. Sukurti patrauklesnes kalbos paskaitas, pajavairinti neįdomią mokymosi medžiagą šiuolaikiniai novatoriški dėstytojai turėtų pradėti naudodamiesi naujomis technologinėmis priemonėmis. Parodydama, kaip tai galima įgyvendinti, straipsnio autorė naudoja savo originalią duomenų bazę / virtualią mokymosi aplinką „Anglų kalba ekologams“, specialiai sukurta *Blackboard vista Web CT* aplinkoje ekologijos specialybės studentams, besimokantiems Vilniaus universitete. Virtualioji mokymosi aplinka padeda studentams įtvirtinti paskaitų metu įsisavintą medžiagą bei paruošia baigiamajam anglų kalbos egzaminui Gamtos mokslų fakultete.

Straipsnio tikslas yra ištirti ir pristatyti virtualią mokymosi aplinką, parodyti jos adaptyvumo tyrimo rezultatus. Galima daryti prielaidą, kad virtualios mokymosi aplinkos specialiai orientuotos į atitinkamą grupę veikia kaip motyvacinė paskata. Šiam tikslui pasiekti buvo iškelti tokie uždaviniai: 1) pristatyti pagrindines motyvacines teorijas; 2) paaiškinti virtualiosios aplinkos struktūrą ir pačią mintį; 3) išanalizuoti respondentų požiūrį ir aptarti, kaip tai sukuria motyvacinį akstiną mokymuisi.

Klausimynas tyrinėja naujumo, praktiškumo, problemų naudojantis virtualia mokymosi aplinka ir kitus klausimus. Tyrimas atskleidė, kad studentai ja labai domisi, yra entuziastingi šios priemonės naudojimuisi ir savarankišku įsivertinimo procesu. Galime daryti išvadą, kad straipsnyje pristatytos virtualios mokymosi aplinkos puikiai atitinka šių dienų technologijomis besidominčių studentų poreikį. Modernių technologijų dėka dėstytojai ir mokytojai gali sukurti stimuliuojančią mokymosi aplinką smalsiems, reikiams ir inovatyviems studentams bei sau patiems.

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