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Výuka odbornému anglickému jazyku se zřetelem na využití e-learningu

English for Specific Purposes with Regard to the Use of E-Learning

Dizertační práce

vedoucí práce - Doc. PhDr. Jarmila Mothejzíková, CSc.

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Prohlašuji, že jsem dizertační práci napsala samostatně s využitím pouze uvedených a řádně citovaných pramenů a literatury a že práce nebyla využita v rámci jiného vysokoškolského studia či k získání jiného nebo stejného titulu.

Lenka Kučírková

V Praze dne 24. 3. 2014

Abstract

The dissertation deals with the experimental research that examines the effectiveness of the ESP e-learning course of Business English in comparison with the method of face-to-face instruction. The literature review has revealed the absence of scientific research in the field of our investigation. It has justified why our proposed research study should be conducted and led us to the rationale for our research.

The main objective of this dissertation was to find out whether the e-learning method was as effective as the face-to-face instruction, i.e., whether there were no statistically significant differences between the results of the students who completed the e-learning course (experimental group) and those who completed the face-to-face course (control group). Simultaneously, we examined whether there were any statistically significant differences in the results of the students at the beginning of the course and at the end of the course within individual groups, i.e., whether the students improved their skills and vocabulary.

The supplementary objective was to find out the students´ opinions on the effectiveness of e-learning depending on the frequencies of their responses and on their qualitative signs. The practical outcome is the ESP e-learning course for the subject of Business English in the Moodle LMS developed within the grant of the Higher Education Institutions Development Fund of the Czech Republic 2011, no. F5-1836.

In the research work, mainly quantitative, partly qualitative data collection methods, including pre-tests, post-tests and a questionnaire survey, were used. The research proved the hypothesis that there were no statistically significant differences in the results of the students studying through the method of e-learning and those taught through the method of face-to-face instruction. This finding is considered an important contribution to the research in the field of ESP e-learning and an important pedagogical success as statistically significant differences between the results of the students of both groups, namely better results of the students taught through the face-to-face method of instruction, would have meant that the method of e-learning was not effective, and it would not be appropriate to continue this method. However, the non-existence of statistically significant differences in the research confirms the functionality and effectiveness of e-learning and justifies the continuation of this method of teaching/learning and work on its improvement. It also indicates that the e-learning course can be offered to distance students, to lifelong learning

students, to students with specific needs and to full-time students in case of a long-term absence. The differences between the observed skills and the vocabulary at the beginning and at the end of the term within individual groups were statistically significant. This finding confirms that the students in both groups improved their skills and vocabulary.

Key words: e-learning, online course, face-to-face instruction, statistically significant difference, experiment, information and communication technologies, skills, vocabulary, questionnaire survey

Abstrakt

Dizertační práce se zabývá experimentálním výzkumem, který zkoumá efektivitu e-learningového kurzu Obchodní angličtiny ve srovnání s tradiční metodou výuky face-to-face. Analýza sekundární literatury odhalila absenci vědeckého výzkumu v oblasti našeho zkoumání. Toto zjištění nás vedlo k závěru, že je tedy třeba studie, která poskytne nové a signifikantní informace na poli výuky odborné angličtiny a e-learningu.

Hlavním cílem této dizertační práce bylo zjistit efektivitu e-learningového kurzu ve srovnání s výukou face-to-face, tj. že neexistují statisticky významné rozdíly ve výsledcích studentů, kteří absolvovali e-learningový kurz (experimentální skupina) a těmi, kteří absolvovali kurz face-to-face (kontrolní skupina). Zároveň bylo zkoumáno, zda existují statisticky významné rozdíly ve výsledcích studentů na začátku kurzu a po ukončení kurzu v rámci jednotlivých skupin. Vedlejším cílem bylo zjistit názory studentů na efektivitu e-learningu v závislosti na četnosti jejich odpovědí a na jejich kvalitativních znacích. Praktickým výstupem je e-learningový kurz Obchodní angličtiny v systému Moodle, který byl vytvořen v rámci grantu Fondu rozvoje vysokých škol č. 2011, č. F5-1836.

Ve výzkumné práci byly užity převážně kvantitativní a částečně kvalitativní metody sběru dat, mezi něž patří pre-testy, post-testy a dotazníkové šetření. Výzkum prokázal, že neexistují statisticky významné rozdíly ve výsledcích studentů, kteří studovali metodou e-learningu a těmi, kteří se učili tradiční metodou face-to-face. Tento výsledek je významným pedagogickým úspěchem a přínosem výzkumu v oblasti ESP e-learningu, neboť zjištění signifikantních statistických rozdílů mezi výsledky studentů obou skupin, respektive zřetelně lepší výsledky studentů studujících klasickou formou face-to-face by znamenalo, že výuka metodou e-learningu nebyla efektivní a nemělo by tedy žádný význam takovouto formu výuky dále realizovat. Zjištění neexistence statisticky významných rozdílů ve výsledcích studentů studujících prostřednictvím výuky face-to-face a těmi, kteří studují prostřednictvím e-learningu však potvrzuje funkčnost a efektivitu výuky metodou e-learningu a opravňuje k pokračování v této formě výuky a k práci na jejím rozšíření a vylepšení. Zároveň opravňuje k využití e-learningového kurzu pro studenty dálkového studia, celoživotního vzdělávání, pro studenty se specifickými potřebami, ale taktéž pro studenty prezenční formy studia v případě dlouhodobé absence.

Rozdíly ve sledovaných dovednostech na začátku a na konci semestru byly statisticky významné jak v experimentální skupině, tak i v kontrolní skupině. Toto zjištění potvrzuje, že si studenti v obou skupinách zlepšili své jazykové dovednosti a slovní zásobu.

Klíčová slova: e-learning, online kurz, výuka face-to-face, statisticky významný rozdíl, experiment, informační a komunikační technologie, dovednosti, slovní zásoba, dotazníkové šetření

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Abbreviations

CAI – Computer Aided Instruction

CALL – Computer Assisted Language Learning

CBI – Content-based Instruction

CEFR - Common European Framework of Reference for Languages

CG – Control Group

CLIL – Content and Language Integrated Learning

CMC – Computer Mediated Communication

CMS - Course Management System

CULS - Czech University of Life Sciences

CR – Czech Republic

EAP - English for Academic Purposes

EFL – English as a Foreign Language

EBE - English for Business and Economics

EBP - English for Business Purposes

EG – Experimental Group

ELP - English for the Law Purposes

ELTE - English Language Teacher Education

EMP - English for Medical Purposes

EOP - English for Occupational Purposes

EPP - English for Professional Purposes

ESL – English as a Second Language

ESP - English for Specific/Special Purposes

EST - English for Science and Technology

EU – European Union

FEM - Faculty of Economics and Management

HTML - Hypertext Markup Language

IATEFL – International Association of Teachers of English as a Foreign Language

ICT – Information and Communication Technology

IT – Information Technology

FLT – Foreign Language Teaching

LMS - Learning Management System

LCMS - Learning Content Management System

Moodle - Modular Object-oriented Dynamic Learning Enviroment

OED – Oxford English Dictionary

SD – Standard Deviation

SIG – Special Interest Group

SPSS – Statistical Programme Statistica 10 Software

STE – Scientific and Technical English

TELL – Technology Enhanced Language Learning

TESL – Teaching English as a Second Language

TESOL- Teaching English to Speakers of Other Languages

VLE - Virtual Learning Environment

VESL – Vocational English as a Second Language

WebCT – Web Course Tool

XML - Extensible Markup Language

1 Introduction

The topic of this doctoral dissertation reflects the real needs and stipulated priorities within foreign language teaching at the Faculty of Economics and Management of the Czech University of Life Sciences Prague. One of the priorities in the field of education is reducing the number of contact hours and the reduction of the lectures´ direct teaching load, which is connected with the use of modern ICT technologies, e-learning courses for full-time forms of studies, for distance studies and for the centres of lifelong learning outside Prague.

Our research is conducted within the institution of the CULS Prague in accordance with its long-term aim, as well as in accordance with the language policy of the European Union, with the national policy of language education and with the long-term aims of the Ministry of Education, Youth and Sports of the Czech Republic. The aim is to be engaged in self-reflective and investigative approaches to understanding and researching our working environment. For the purposes of the research, the e-learning course was developed within the grant of the Higher Education Institutions Development Fund of the Czech Republic 2011, no. F5-1836.

The research can be understood as the "action research" which refers to the classroom investigation initiated by researchers, i.e., teachers, who look critically at their own practice with the purpose of improving their teaching and the quality of education (B. A. Blázquez, 2007: 27). It connects received knowledge based upon practical professional experience with experiential knowledge by a continuous process of reflection. It engages practitioners in a critical and reflective attitude to their work. Teachers try to answer questions related to an aspect of their professional practice. This means that they collect and analyse data, reflect, what they discover and then apply it to their practice. Bailey (2001: 490) points out that research which can be called the "action research" denotes a particular approach to collecting and interpreting data that involves a set of reiterated procedures for teachers (researchers) to conduct research in their own settings. The broad goals of action research are to bring about improvement in the context under study (Bailey, 1998a in Bailey, 2001: 490). Action research has been popular since 1980 and as Bailey (2001: 495) stressed: "The advent of action research as a legitimate approach to investigating phenomena in a language classroom has opened a wide range of new topics

as well as promoting research by teachers who use this model." Teachers' beliefs emerge from a complex of social and individual influences, including their own experience, educational theories, and their relationship with students, colleagues and superiors. (B. A. Blázquez, 2007: 27). This new perspective, known as social constructivism, considers the act of learning to be more than the construction of new meanings; it involves cognition as well as feelings. The social element implies that the social constructivist perception recognises collaborative dialogue to be central to the process of experiential and attitudinal growth of teachers (B. A. Blázquez, 2007: 28) (see 4.2.2).

1.1 Language policy in the national and European context in relation to specific languages teaching and with regard to e-learning

The systems of education and specialist training in individual countries of the European Union reflect the diversity of languages, cultures and systems that are a part of each country's identity. At the same time, however, there is an increasing need for cooperation in these fields throughout the whole Europe. The meeting of the European Council in Lisbon in 2000 supported the development of cooperation and started the process towards the acceptance of the Work Programme, specifying the aims of the systems of education and training. These aims were approved by the ministers of EU member states responsible for education and training, together with the European Commission, with the emphasis on common interests and with regard to national specificities as of 14 February 2002. This cooperation is to be achieved by promoting the mobility of citizens, exchanging information, teaching languages of the EU, etc. EU member states began to work together in order to reach a set of 13 specific goals in the field of education which was referred to as "Education and Training 2010 Work Programme – challenges and results" (Andersen, 2008). Education and training have been recognised as significant prerequisites for the development of today´s knowledge society and economy. EU member states and the European Commission strengthened cooperation in a follow-up to the earlier Education and Training 2010 Work Programme named the "Education and Training 2020 Framework" (ET 2020) in 2009 (Education and Training 2020 Framework, 2009).

This doctoral dissertation is focused on English for Specific Purposes with regard to the use of e-learning, reflects the current needs of English language teaching in the Czech

Republic since the accession to the European Union, and reacts to strategic aims and objectives in both programmes. Strategic aims and objectives are stipulated in the above mentioned documents, such as the strategic aim of improving the quality and effectiveness of systems and training in the European Union. Under this strategic aim, there are the objectives concerning the development of competencies for a knowledge-based society, including knowledge of languages, using information, communication and other technologies, supporting their mastering and lifetime retention as well as ensuring access to ICT for every individual. The next strategic aim is focused on facilitating the individual´s access to lifelong learning opportunities, with the objective of strengthening lifelong learning by improving the attractiveness of learning and vocational training. The final strategic aim which supports opening the systems of education and training to the world (internationalisation), includes the objective of improving the studies of foreign languages. The European Union emphasises the significance of foreign language studies in Europe and supports it as one of the key objectives of education, culture, citizenship and employment. Mastering more than one language is one of the basic competencies of the Europeans. The prerequisite to achieving this objective is the change and innovation in methods of teaching, strengthening the awareness of the significance of foreign language studies, motivation to studies, and practical use of foreign languages (Generální ředitelství pro vzdělávání a kulturu - Vzdělávání a odborná příprava v Evropě, 2003). In October 2008, The Government of the Czech Republic passed the document "The concept of information and communication technologies development for the period 2009 – 2013" (No. 1276/2008). The Ministry of Education, Youth and Sports of the Czech Republic, in a direct connection to this document, accepted the Action Plan "School for 21st Century", which was created by a team of experts in ICT and led by Milan Hausner (Akční plán, n.d.). The technological aspects of ICT and motivation of pedagogical workers are dealt with. The present state of technology application for educational purposes in the world, in the European Union and in the Czech Republic is analysed. It is a follow-up to the document the State information policy in education carried out in 2000 – 2006. The ways to achieve a level comparable to that in other countries of the EU, based on valid legal regulations, standards, methodological recommendations and on the Long-term objective of the Ministry of Education, Youth and Sports of the CR are described. One of the priorities of the document "School for 21st Century" is the implementation of ICT into

education, not only into the subject of informatics but also into other subjects. Key competences for life in the 21st century and for lifelong learning are defined. They are based on the official document of the European Parliament and the Council (Recommendation of the European Parliament and the Council of 18 December 2006 on key competences for lifelong learning - 2006/962/ES), such as communication in foreign languages and competence to work with digital technologies (Akční plán, n.d.).

The achievement of the Action Plan "School for 21st century" does not consist only of supplies of computers, hardware and software into schools, but also of the change of procedures that do not fit the contemporary view of competences desirable for the 21st century. Its successful achievement is conditioned by the support of educational institutions, and also by the public. The primary aim is to enhance the interest and motivation of students in these competences in order that they could compete on contemporary European and world markets.

The Action Plan recommends extraordinary attention to be paid to the evaluation of the application of technologies in teaching, i.e., to the feedback. A continuous process of monitoring the state by means of online tools is suggested. Our research, which attempts to verify the effectiveness of the e-learning method in comparison with the face-to-face instruction, is then in compliance with the requirement of both the Ministry of Education, Youth and Sports, and the European Union.

 Language education in the Czech Republic is harmonised in accordance with the recommendation and documents in the field of language policy of the Council of Europe and the European Commission, such as the Common European Framework of Reference for Languages (CEFR). This is meant to overcome communication barriers among professionals working in the field of foreign language teaching, owing to different educational systems in Europe. An important role in the development of language education is played by institutions of higher education and universities which help achieve objectives set in the above mentioned documents of the European Union. This is accomplished by means of the application of modern teaching methods, by processing quality teaching materials and wide use of information and communication technologies for e-learning application.

This is also significant for people with specific needs who must be able to lead full lives and make decisions freely for themselves. Even if policies for people with disabilities are

often limited to financial or material support, the emphasis should be placed on fuller "inclusion" within the community.

In April 2006, the Council of Europe adopted a <u>Disability Action Plan 2006-2015</u> which contains 15 action lines, including participation in political, public and cultural life, education, information and communication etc. The Internet (online work) offers enormous potential for improving the social inclusion of people with specific needs removing barriers and creating an inclusive and accessible society (Council of Europe, 2013). Therefore, this issue has been taken into consideration when developing the course and writing this doctoral dissertation.

1.2 Objective of this dissertation

The main objective of this dissertation is to find out whether the e-learning method (pure online course) of Business English is as effective as the method of face-to-face instruction, i.e., whether there are no statistically significant differences in the results of students who completed the e-learning course and those who completed the face-to-face course. At the same time, we examine whether there are any statistically significant differences in the results of the students at the beginning of the course and at the end of the course within individual groups, i.e., whether the students improved their skills and vocabulary.

 The supplementary objective is to find out students´opinion on this issue depending on the frequencies of their responses and on their qualitative signs. The practical outcome is the ESP e-learning course for the subject of Business English in the Moodle learning management system (LMS) at the Czech University of Life Sciences Prague. It is intended for distance students, for lifelong learning students, for students with specific needs and also for full-time students in the case of their long-term absence. The effectiveness of this innovative e-learning method was verified through the experiment.

As the title of the dissertation indicates, e-learning is integrated into the programme of English for Specific Purposes and adds a new dimension to the teaching of languages, and is of great potential. The empirical research, which is conducted in order to compare the effectiveness of the e-learning method and the face-to-face instruction through the analysis of statistically significant differences, is an unresearched area in the Czech Republic and abroad.

1.3 Structure of this dissertation

The structure of this dissertation reflects the objectives mentioned above. The first part is theoretical, and the second part is the empirical research.

Chapter 1 concerns the language policy in the European, as well as in the national context in relation to the teaching of specific languages and with regard to e-learning. It reflects the current needs of English language teaching in the Czech Republic since the accession to the European Union. Strategic aims and objectives such as improving the quality and effectiveness of systems and training in the European Union in educational programmes are specified. The objective of this dissertation is dealt with next, and finally, the structure of this dissertation and the methodology are introduced.

Chapter 2 deals with the complex issue of English for Specific Purposes (ESP) starting with the explanation of the term of special/specific language, through ESP development, definitions, classification and relation to the Content and Language Integrated Learning (CLIL), and finishing with a discussion on the current attitudes towards ESP, particularly on Business English. In this chapter, our view on ESP as teaching /learning the English language based on the content that is not contextualised and that is related to subject specialism and students´ needs is expressed. Students learn about the relevant content while they improve their English skills.

Chapter 3 introduces the topic of e-learning. Firstly, it focuses on e-learning development and e-learning definitions. Then advantages and disadvantages of e-learning and the future of e-learning are discussed. A significant part of this chapter is based on our own determination of e-learning which is called "ESP e-learning". It is determined as an online support of the educational process, the method through which the ESP course is implemented, and ESP which provides subject-matter terminology and the background for specialist disciplines.

In this chapter, specific ESP e-learning methodology, which encompasses language learning, specialist subject learning and e-learning approaches are stressed. Finally, the role of a teacher and that of a student in ESP e-learning are clarified.

Chapter 4 concerns ESP e-learning and related theories of language and learning theories, which provide theoretical bases for the ESP e-learning methodology, and both are theoretical bases of the course design.

Chapter 5 represents a contribution to the ESP e-learning methodology by a theoretical description of the development of the skills and vocabulary, and suggests the possibilities of how to develop them practically through ESP e-learning activities. It concerns vocabulary, reading, listening, writing, speaking and translation as the fifth skill in ESP e-learning.

In chapter 6, the literature review of the research in the field of ESP e-learning is introduced and discussed. The literature review is organised according to topics related to ESP e-learning and according to whether the research was conducted in the Czech Republic or abroad. The literature review has revealed the absence of scientific research in the field of our investigation and justifies why our proposed research study should be conducted.

In chapter 7, the empirical part starts. First of all, language education at the Faculty of Economics and Management of the Czech University of Life Sciences Prague is introduced, then the e-learning course, which was developed within the grant of Higher Education Institutions Development Fund of the Czech Republic 2011, no. F5-1836, is presented together with the technical solution within the Moodle LMS.

Chapter 8 presents research methodology. The objective of the research is aimed at finding out whether the e-learning method is as effective as the face-to-face instruction, i.e., whether there are no statistically significant differences in the results of students studying through e-learning and those studying through the face-to-face instruction. The components of the experimental research design are introduced in this chapter.

Chapter 9 and 10 present the Pilot Study and the Study Proper together with the research instruments, validity control and the verification of the tests reliability. The interpretation

of the results in the pre-tests, post-tests and questionnaires are introduced. Finally, the summary of the findings and limitations of the study are discussed.

Chapter 11 summarises the findings and offers recommendations for practice and for future research. Finally, the contribution to the methodology of foreign language teaching/ learning is presented.

1.4 Methodology

This dissertation consists of theoretical and practical parts.

The theoretical part is worked out on the basis of secondary sources analysis, i.e., the analysis of specialist literature available in libraries and on the Internet.

The empirical part is worked out on the basis of outputs from experimental research. Our model of the experimental research design is deductive with a high level of explicitness of data collection represented by tests of high explicitness such as multiple choice and true/false tests. This research is concerned with testing hypotheses, with the control of variables, validity and reliability. The population is represented by students of the Czech University of Life Sciences Prague within the bachelor studies who enrolled into B1 courses according to the CEFR in the winter term of the academic year 2012/2013. The research sample of 107 students is represented by those full-time students of B1 level who enrolled into the subject of Business English. The e-learning method is an independent variable in the research. The measurement is a dependent variable in the research. In both research studies, i.e., the pilot study and the study proper, mainly quantitative and partly qualitative data collection methods, including pre-tests, post-tests and a questionnaire survey, were used.

 The results of the pre-tests and the post-tests in the study proper were processed into tables and assessed by means of statistical methods at the CULS department of statistics. To test the statistical hypotheses, non-parametrical tests were chosen. In the case of dependent samples (pre-tests and post-tests within the same group), Wilcoxon pair test was used. On the contrary, Mann-Whitney test is primarily determined to test independent samples (pre-tests and post-tests with different groups). Statistica 10 statistical programme was used for the calculation. From each table, statistically significant difference between the results in the pre-tests and the post-tests in single measured activities was calculated. When the p-

value, which expresses the lowest possible value of significance, was lower than the significance level of 0.05, the difference was statistically significant. For the elementary description of the results, absolute and relative frequencies and basic descriptive characteristics, such as the mean and the standard deviation were used as the more complex analyses used in analysing the data of experimental research rely on them.

The results in the pre-tests and post-tests between the control group and the experimental group were compared and interpreted, as well as the results between the pre-tests and the post-tests within individual groups. Students´questionnaires results were statistically analysed and interpreted, too. Finally, conclusions were made and the contribution to the methodology of foreign language teaching/learning was specified.

THEORETICAL OVERVIEW

2 English for specific purposes (ESP)

2.1 Language for specific/special purposes (LSP)

The main aim of specific/special language teaching is mastering the given lexical and syntactic means with regard to the specialist orientation of students. There are many definitions that concern a special language and its linguistic features. Hendrich (1988: 119) defines the term of special language as "The system of language means, the selection and arrangement of which serves to oral or written communication of special (scientific, technical or another) content." These language means are the part of the national language, in the framework of which they represent – in accordance with the Prague School of Linguistics – one of the functional styles: a specialist language style. Similarly, Voráček (1987: 5) characterises a special language as a "Language subsystem that is the set of all language means serving communication among specialists on special issues." According to Mothejzíková (1983: 23), "Special style both in English and Czech is characterised by specific language means at all levels." Jelínek (in Mothejzíková, 1983: 24) divides a special style into a scientific style, and a practical style, with a reflective style being between them. Chromá (2004: 13) characterises LSP as "a subsystem of a general language system which consists of the selection, combination and use of existing morphological, lexical and syntactic units, structures and patterns that would best serve the specific social context." Sager, Dungworth and McDonald (1980: 69) define special languages as "semi-autonomous, complex semiotic systems based on and derived from general language; thein use presupposes special education and is restricted to communication among specialists in the same or closely related fields". Thus, in English stylistics, the styles are differentiated primarily according to the form of texts and then according to the content: essays, reviews, news, speeches etc. Functional styles according to the form are called messages. "Messages are the largest pragmatic units just as sentences and words are the major syntactic and semantic units". (Sager, Dungworth and McDonald, 1980: 104). The main types of messages are special dialogues, memos, reports, schedules, and essays. Special English is characterised by linguistic features on the syntagmatic and lexical levels. Within

sentence types, there are declarative sentences and imperative sentences (instructions). The finite verb forms that occur in special English are particularly: simple present, present perfect (when summerising the content), passive voice, modal auxiliaries (shall/should, may/might, will/would). Non-finite verb forms are, for instance: infinitive, past participle and ing forms. Nominal groups are also typical: premodification (elements in front of the head word - the hardest naturally occuring substance) and postmodification (the result needed for assemblies of photons). The diversity of text forms required in any special language determines the range of designations necessary for a special subject. The authors mention the types of characteristics upon which terms are based, such as the following: shape (toothed wheel), size, composition, function (grinding machine), position (rear), characteristics of origin, name of inventor (Otto motor). New terms can be formed by **redefinition** (narrowed meanings of existing words – *force:* acceleration in the textbooks of physics), **affixation** (prefixes, suffixes derivation, production of a different word category: absorption – absorb), **compounding** (linseed), **backformation** (oxygen-free, pressure reducing valve), **conversion** (from one word category into another without any change in the form: face), **compression** (abbreviations, acronyms), **the use of new resources** (neologisms - echometer, tachograph, borrowings - Latin, Greek, French, German). The language for specific purposes encompasses English for specific purposes. "ESP is part of a more general movement of teaching Language or Specific Purposes" (Dudley-Evans and St John, 2005: 2).

2.2 English for specific/special purposes (ESP)

2.2.1 ESP development

According to Howatt and Widdowson (2008: 340), the roots of ESP can be traced back to the 15th – 16th century when the first manuals for teaching English were printed. They were full of material that was of special interest to traders in agricultural products, and French merchants in the wool trade. The authors mention the practical significance of coffee-house dialogues from *Nouvelle Méthode pour apprendre l´Anglois* written in the 17th century by Guy Miege. In the 18th century it was John Miller´s book, *The Tutor,* written to teach English, the main content of which was a set of practical dialogues relating to river-boat trading. A standard topic in foreign language manuals at the end of the 19th

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century and at the beginning of the 20th century was also letter writing. Harold Palmer wrote two books of business correspondence with model letters called *Correspondance commerciale anglaise* (1906) and *Cours élémentaire de correspondance anglaise (1912).* The authors also stress the importance of Michael West´s English reading scheme for the purpose of information, and Ogden´s and Salzedo´s works including *Basic for Business, A Basic Astronomy, The Chemical History of a Candle* in the 1930s and 1940s.

It is also important to see the connection of ESP with the Geneva and Prague linguistic schools (functional and structural linguistic stream) at the beginning of the 20th century, particularly with the thoughts and work of Swiss linguist Ferdinand de Saussure and Czech linguist Vilém Mathesius and his co-workers. Ferdinand de Saussure was the first scholar to examine language as a social fact and language as one system. In his Cours de Linquistique Génerale (1915), he distinguished between la langue and la parole. (La langue – a linguistic system as a social product. La parole – the real interpersonal use of language in a given situation). At the beginning of the 20th century, structuralism was combined with functionalism by the Prague Linguistic Circle, which was founded in 1926. The linguists belonging to the circle (including Vilém Mathesius, Bohumil Trnka, Bohuslav Havránek, Roman Jakobson, and Josef Vachek), were interested in the functional style. They examined the development of the language as the development of the system, and they refused the study of isolated language features development. Vilém Mathesius concentrated on a synchronous study of the language. When analysing the language, he came out from the expression needs and tried to state the function of single expression language means to satisfy these needs (Mathesius, 1961).

According to Hutchinson and Waters (1987: 6) the growth of ESP resulted from general developments in the world economy in the 1950s and 1960s. The authors identify three main factors that led to the emergence of ESP. They were: demand for an international language (English to suit particular needs), then developments in the fields of linguistics and in educational psychology. After World War II, the expansion in scientific, technical and economic activity on an international scale, generated a world dominated by technology and commerce that soon created a demand for an international language. English fulfilled this role - a new generation of learners knew why they were learning the English language. New ideas emerged in the study of language at the same time, as the demand for English for Specific Needs was growing. Traditionally, the aim of linguistics

was to describe the grammar, the new studies focused on the ways in which language is actually used in real communication. The guiding principle of ESP became the sentence: "Tell me what you need English for and I will tell you the English that you need." (Hutchinson, 1987: 8). New developments in educational psychology contributed to the rise of ESP by emphasising the learners' significance and their attitudes and motivation to learning - Rodgers: "*Freedom to Learn*" (1969). After World War II, linguists felt the importance of language studies in relation to the context of communication. J. R. Firth, the representative of the London School, was one of the first scholars to be concerned with the register for special purposes. For him, a restricted language (glossed as a vocational, technical and scientific language) is defined as serving a circumscribed field of experience or action and can be said to have its own grammar and dictionary (Maglie, 2004). His work became the background to Halliday's systemic functional grammar and study of registers. He sees the language as the exchange of meanings in interpersonal contexts. A register is the language one is speaking at a particular time, determined by what you and others are doing there, i.e., by the nature of the ongoing social activity. (Maglie, 2004) The aim of the register analysis was to identify the grammatical and lexical features of registers and produce a syllabus that gave high priority to the language forms students would find in their studies (compound nouns, passives, conditionals, modal verbs). An example of such a syllabus was that of *A Course in Basic Scientific English* (1969) by Ewer and Latorre. Ewer was a teacher of English and Latorre a subject specialist. Their cooperation was a good example of the kind of team-teaching that is also used in Content and language integrated learning (CLIL) nowadays. This stage of the register analysis, particularly in the 1960s and 1970s, was represented by descriptions of written scientific and technical English in the work *The Linguistic Sciences and Language* Teaching (1964) by Halliday, McIntosh and Strevense. The first stage of ESP development was focused on the language at the sentence level. In the second phase, the attention was shifted from the sentence level "to understanding how sentences were combined in a discourse to produce meaning". (Hutchinson and Waters, 1987: 11). A number of linguists´ works were produced during this time, such as Widdowson's *Teaching Language as Communication* (1978) and *Explorations in Applied Linguistics* (1979) and Trimble´s *A Discourse Approach* (1985). Teaching material based on the discourse approach, such as the *English in Focus* (1974) series by Allen and Widdowson, taught intermediate-to-advanced students to recognise

organisational patterns in texts and discourse markers. The second series called *Nucleus* (1976), edited by Bates and Dudley-Evans started with general science and then added volumes in geology, medicine, and engineering among others. The exercises were constructed for laguage teaching purposes, not selected as examples of authentic scientific English. This issue of construct/authentic texts was of a continuing interest in ESP discussions.

The next stage in ESP development (Hutchinson and Waters, 1987) is known as needs analysis. The purpose is to analyse a target situation in which the learners will use the language they are learning, and then the analysis of the linguistic features of that situation. The features will form the syllabus of the ESP course. The most thorough explanation of target situation analysis is John Munby´s *Communicative Syllabus Design* (1978). This approach looked at the surface linguistic features of the target situation; however, there was an attempt to look below the surface and to consider the thinking processes that underlie language use. There were special purposes projects concentrated on reading strategies, such as the University of Malaya ESP Project that appeared in the UK under the title *Skills for Learning* in the 1980s. The focus was on the underlying interpretive strategies; i.e., guessing the meaning of words from context, exploiting words similar in the target language and mother tongue. This approach to ESP is based on the understanding of the process of language learning and on the principle that this learning is totally determined by learners. The work of Hutchinson and Waters, *English for Specific Purposes* (1987), can be mentioned in this field. In the 1990s, Duddley-Evans and St John published *Developments in English for Specific Purposes (1998).* In this monograph, the authors clarified the meaning of ESP and gave an extended definition of ESP in terms of absolute and variable characteristics (see below). According to them, the main concern of ESP is preparing learners to communicate effectively in the tasks prescribed by their study or work. ESP was dominated by the teaching of English for Academic Purposes (EAP) in its early stages. Most of the material in the area of EAP was produced at this time; course descriptions were written and research was conducted. In recent years, the expansion of international business has led to a rapid growth in the area of Business English. Other titles that came out in the 1990's included the works by Jordan: *English for Academic Purposes* (1997), Nunan: *Language Teaching Methodology* (1991), *Syllabus Design* (1993), *The*

Learner-Centred Curriculum (1996), West: *ESP – The State of the Art in Making ESP Work* (1995) and Swales: *Genre Analysis* (1990).

2.2.2 ESP definitions

What is English for specific purposes? The answer is not simple; it depends on the ESP text, on the lecture presented and on one´s own experience. Definitions of ESP are numerous. They have been brought together to make a survey of what is involved in ESP. Rebecca Smoak raised this question and found the answer that had been developing through her teaching career. She comes to the conclusion that ESP is "English instruction based on actual and immediate needs of learners who have to successfully perform real-life tasks unrelated to merely passing an English class or exam."(Smoak, 2003: 27). We can agree with her view that ESP is not just concerned with teaching technical terms, but also with teaching sub-technical vocabulary, i.e., words that surround the technical words. We think that it is also important to teach terminology and concepts, which students need for their studies, with their theoretical explanations, so that students are able to work with specialist literature and clearly present their views on their respective fields of study. Attention to the needs of students seems to be one of the key elements in a number of ESP definitions. Dudley-Evans and St John in Developments in English for Specific Purposes, (2005: 4, 5) state that ESP has to fulfill these characteristics:

Absolute Characteristics:

- ESP is defined to meet specific needs of the learners.
- ESP makes use of the underlying methodology and activities of the disciplines it serves.
- ESP is focused on the language appropriate to these activities in terms of grammar, lexis, skills discourse and registers.

Variable Characteristics:

- ESP may be designed for specific disciplines.
- ESP may use, in specific teaching situations, a different methodology from that of General English.

- ESP is likely to be designed for adult learners, however, it could be designed for the secondary school level.
- ESP is generally designed for intermediate or advanced students.

Most ESP courses assume some basic knowledge of the language system. From these characteristics, it can be inferred that ESP may be - but is not necessarily concerned with - a specific discipline; it is seen as "an approach to teaching". A similar conclusion, as far as an approach is concerned, is drawn by Hutchinson and Waters (1987); however, they take a different view of the methodology. They state that there is no ESP methodology. English for Specific Purposes is characterised as an "approach to language teaching in which all decisions as to the content and method are based on the learner´s reason for learning". (Hutchinson and Waters, 1987: 19). In our view, any ESP could be considered as an approach to teaching/learning every time it is concerned with specific disciplines because a specific attitude of teachers to teaching/learning is necessary. At the same time, we cannot agree with their view that ESP is not a kind of language or methodology (see 2.2.2.1). Robinson (1980) differentiates between English for Special Purposes and English for Specific Purposes. English for Special Purposes is thought to suggest special languages, i.e., restricted languages, which is only a small part of ESP for many people. English for Specific Purposes focuses attention on the purpose of the learner and refers to the whole range of language resources. This point leads us on to another element in the definition of ESP, namely that it is the purpose for which the learner is studying that is special or specific. This approach to learning is focused on successful performance in English rather than on the knowledge of the rules of English. The measure of success for students learning English, for instance hotel waiters, is determined by whether or not they can perform adequately as hotel waiters in English, rather than their performance in English examinations. Mackay and Mountford (1978) consider ESP and EST as a major sub-division of the field of teaching English for Special Purposes. They claim that ESP is a dominant approach to the teaching of English as a foreign language. It is generally used to refer to the teaching of English for a clearly utilitarian purpose. Special language is understood as a restricted repertoire of words and expressions that covers every requirement within the task or vocation (for example: air-traffic control). According to Maglie (2004), ESP is considered a branch of LSP, which has concentrated mainly on helping students learn the linguistic peculiarities of languages for specific purposes.

Students have to master them in order to be competent members of the discourse communities they want to join. Brumfit (in Robinson, 1980) suggests that ESP is not necessarily a new approach, but rather a new emphasis in teaching. The part of this new emphasis is put on the learner rather than on the teacher. Kennedy and Bolitho (1984: 1) describe ESP as a particular aspect of English Language Teaching (ELT). Learners realise that specialised courses in English could help them, for instance, in conducting business transactions, reading reports, etc. That means that they want to learn English for particular reasons that are connected with their studies or their jobs. Here we can see the close relation to philosophy, the border discipline of ELT methodology, as the authors focus on the view of language as a set of functions similarly to Austin (2000), who classified speech acts according to what we do by means of language expressions in certain situations. For instance, we use the language to cause things to be done, to describe, to classify, qualify, and to hypothesise, etc.

2.2.2.1 Our determination of ESP

Based on our own experience, ESP should be seen in the following dimension. We view it in complexity as teaching /learning the English language based on the content that is not contextualised and that is related to subject specialism and learner's needs. The language means for us the English language itself, i.e., English special/specific/specialist language and we would define ESP as the first stage of Content and Language Integrated Learning (CLIL). Under the content, we understand the knowledge not only of grammar and terminology, but also the knowledge of elements and definitions of a subject matter (economic and business concepts). We agree with Strother (2005) that ESP includes dualpurpose education – students learn about relevant content while they improve their English skills – and a high level of intrinsic motivation since students are studying subjects in which they are interested.

However, we disagree with Hutchinson and Waters (1987) who reject the idea that ESP methodology differs from that of General English teaching and claim that there is no such thing as an ESP methodology. We are inclined to agree with the view of Dudley – Evans and St John (2005: 187) that a distinguishable ESP methodology exists. It arises from the following factors:

- Learners´specialist knowledge

- Cognitive and learning processes of learners brought through their experience of learning or working within the specialist field

A strength of ESP methodology is the way in which language learning and subject learning approaches can be integrated. Two particular examples of subject learning approaches that have been adopted in ESP situations are case studies (mini-case studies such as designing an advertisement, a poster, writing a letter etc.) and project work (Dudley-Evans and St John, 2005: 192). However, in considering which approach to utilise, there is no "best" method. Techniques and methods are a response to a particular situation, so ESP teachers should select and adapt their methodology to match the learners´ needs. By methodology they are referring to the nature of the interaction between the ESP teacher and the learner. The methodology of ESP teaching may not differ radically from that of General English; however, there is one basic difference that influences the methodology: learners have specialist knowledge that ESP teachers usually do not have; teachers are not in the position of primary knowledge-holder. Dudley-Evans and St John (2005: 4) state in their definition of ESP that ESP teaching should be based on the methodology of the disciplines and professions it serves, i.e., of the disciplines and occupations that learners are following through the use of case studies and project work.

2.2.3 ESP classification

Specific English covers a whole range of phenomena on the bases of which we can distinguish various types of specific English.

Hutchinson and Waters (1987) identified three large categories:
- ❖ English for Science and Technology
- ❖ English for Business and Economics
- ❖ English for Social Sciences

They are divided according to whether or not the learner requires English for academic study: English for Academic Purposes or for work/training: English for Occupational Purposes/English for Vocational Purposes/Vocational English as a Second Language. This cannot be the only distinction as people can work and study simultaneously. Kennedy and Bolitho (1984) divide ESP in the following way:
- ❖ English for Occupational Purposes
  - Pre-experience

- Simultaneous
- Post-experience
❖ English for Academic Purposes
- Discipline-based (pre-study, in-study)
- School subject (independent, integrated)
❖ English for Science and Technology

Kerr (1977) uses the following useful classification:
❖ English for Social Purposes (Social English)
❖ English for Academic Purposes
- English of Social Sciencies
- English of Science and Technology
❖ English for Occupational Purposes

Mackay and Mountford (1978) mention English for Science and Technology (EST) within the field of teaching English for Special Purposes. No other sub-divisions were mentioned. Dudley-Evans and St John (2005) stress that ESP has traditionally been divided into two main areas: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). They also introduced a typical tree diagram for ESP, which divides EAP and EOP according to the discipline or professional area:
❖ English for Academic Purposes
- English for Academic Science and Technology
- English for Academic Medical Purposes
- English for Academic Legal Purposes
- English for Management, Finance and Economics
❖ English for Occupational Purposes
  ❖ English for Professional Purposes
  - English for Medical Purposes
  - English for Business Purposes
  ❖ English for Vocational Purposes
  - Pre-Vocational English
  - Vocational English

Johns and Price-Machado (2001) have created another set of ESP categories, and they stress that the chart is far from exhaustive as there is a remarkable array of ESP courses throughout the world:

- ❖ English for Academic Purposes (EAP)
    - ❖ English for Science and Technology (EST) – Academic
    - ❖ English for Business and Economics (EBE) – Academic
    - ❖ English for Medical Purposes (EMP) – Academic
    - ❖ English for the Law Purposes (ELP) – Academic
- ❖ English for Occupational Purposes (EOP)
    - English for Professional Purposes (EPP)
        - English for Medical Purposes (EMP)
        - English for Business Purposes (EBP)
    - Vocational ESL (VESL)
        - Pre-employment VESL
        - Occupational-Specific VESL
        - Cluster VESL
        - Workplace VESL

As noted by Johns and Price-Machado (2001: 52) ESP is well established, particularly in academic and business contexts.

Our course of Business English is based on this model, particularly on **English for Business and Economics – Academic.** However, the content is also related to occupational purposes - **English for Business Purposes.**

2.2.4 ESP and CLIL (Content and Language Integrated Learning)

CLIL is defined as an educational approach in which an additional language (vehicular language) is used for the teaching and learning of both content and language. It is neither a new form of language education, nor a new form of subject education, but an innovative fusion of both forms (Coyle, Hood and Marsh, 2010). CLIL is the integration of contextualised content (subject-matter), cognition (learning and thinking processes), communication (language learning and using) and culture (developing intercultural understanding and global citizenship) into teaching and learning. It can provide learners of any age with a more natural situation for language development that builds on other forms

of learning. This natural use of language can motivate learners to learn languages. What is the relation of ESP and CLIL? In our view, ESP seems to be the first stage of Content and Language Integrated Learning (CLIL). CLIL integrates content learning and language learning to ensure that both are important. There is a need to encourage participants to become skilled in terms of language competence and content knowledge in context. It is becoming associated with the promotion of English as a vehicular language. On the contrary, in English for Specific Purposes, the content subject-matter is being used as a mere vehicle for language enhancement and the stress is being laid upon the attention to language competence as advocated, for instance, by Dudley-Evans and St John (2005). In our ESP lessons, the intention is not only to enhance language and progress in language development, but also to progress in non-contextualised content knowledge based on a study material. In CLIL, we can see that there is a crucial need to involve both content-subject lectures and language teachers so that they can work together - as both are experts in their fields - or content-subject lecturers proficient in a vehicular language (typically English). In ESP, a language teacher, who does not need to have specialist subject knowledge, usually teaches. But, as Hutchinson and Waters (1987: 163) mention, ESP teacher should have a positive attitude toward the content knowledge of the fundamental principles of the subject-matter. We could add from our own experience that ESP teachers should be willing to learn subject-matter through teaching specialist materials – by talking to students and asking them questions concerning the subject- matter - because students are happy to explain it to the language teacher. As far as the level of the vehicular language in ESP is concerned, based on our experience and on studies and literature on ESP, the level should be at least intermediate. In CLIL, it is also assumed that cognitive gains would not be possible until individuals reach a certain level of language mastery. Some researchers admit that cognitive gains may be activated despite low levels of language competence (Coyle, Hood and Marsh, 2010: 165).

Recently, there has been a high degree of international convergence as a result of globalisation that has influenced educational policies across different countries. CLIL developed as a response to globalisation, the impact of which was obvious during the period of rapid integration in Europe from 1990 to 2007. According to Coyle, Hood and Marsh (2010), the globalisation and the emergence of new technologies have brought us to the "Knowledge Age", which is characterised by core issues having an impact on how we

can reshape the ways of teaching languages. These issues integrate education, research and innovation. CLIL has become the major educational initiative within the European Union since 1990, and in 2005 the European Council recommended that CLIL should be adopted throughout the entire European Union. The reason for the rapid acceptance of CLIL in many countries can be traced to the following motives: the need to have some competence in at least one foreign language, improvement of languages education for socio-economic advantage, laying the foundation for greater inclusion and economic strength and the potential of further integration of languages education with that of other subjects (Coyle, Hood and Marsh, 2010).

2.2.5 ESP nowadays

As Dudley-Evans and St John (2005: 30) state "There is currently no dominating movement in ESP … there is now acceptance of many different approaches and a willingness to mix different types of material and methodologies". ESP is a movement that has its own particular characteristics (variable and absolute ones, see above). Presentations on theoretical, descriptive and applied studies of the English language for specific purposes at conferences on languages for specific purposes can be attended. The topic of ESP is often connected with innovations in the lessons, the inclusion of information and communication technologies into the lessons and e-learning; there is a growing demand for specialists able to develop computer-based curricula. Important information, knowledge, thoughts, and ideas on ESP remain scattered in ESP journals and in conference proceedings, not readily accessible to teachers or course designers. The largest professional organisation, TESOL, has ESP Interest Section whose members represent a wide variety of EFL and ESL contexts. "Whatever its directions, ESP will remain central to ESL and EFL teaching throughout the world" (Johns and Price-Machado, 2001: 52).

There are well-established journals dedicated to ESP, such as: ESP across Cultures, English for Specific Purposes, an international journal, English Teaching Forum, AUA Newsletter, and The Internet TESL Journal. ESP SIG groups of the IATEFL and TESOL are always active at international conferences.

2.2.5.1 Business English

Since 1990, the major strand of ESP teaching and the large area of growth has been represented by **Business English.** Specifically, "the area of academic Business English is beginning to assume greater importance in EAP" (Dudley-Evans and St John, 2005: 31). There is a growing diversity in ESP teaching, moving from grammatical, functional and notional syllabuses to a more eclectic approach. ESP is a broad field in which Business English has become increasingly significant. Dudley-Evans and John (2005: 53) state that Business English - both academic Business English and English for Business Purposes – "is currently the area of the greatest activity and growth in ESP". The academic Business English is required for students in disciplines such as business, finance, accounting etc. at higher education institutions, while English for Business Purposes (included under English for Occupational Purposes) is concerned with students working or preparing to work in a business context. Most ESP (BE) teachers have a language education and they do not typically have a background in the content and context of business disciplines. As teachers of Business English, our students do not expect us to know how to run a business, but they expect that we have knowledge of how language is used in business. Of course, some understanding of business concepts and the ability of teachers to balance content level and language level can be useful. On-going professional development of this kind is important for ESP teachers. "The interdisciplinary nature of ESP is both a stimulus and a challenging demand" (Dudley-Evans and St John, 2005:60).

3 E-learning/E-Learning/e-Learning/eLearning (electronic learning)

Different forms of spelling of this term are used within specialist publications. It is connected with the existing terminological inconsistency. "The letter **e** suggests that e-learning is electronically mediated. The term implies that learning is given priority over teaching" (Černá, 2005: 39).

3.1 E-learning development

Information and Communication(s) Technologies (ICTs) have appeared as a transformative element in language teaching and learning, and have become an integral part of a number of courses of English for Specific Purposes (ESP) in the last few years (González-Pueyo, 2011). However, technology in language teaching is not considered to be new. Since the 1960s and 1970s, tape recorders, videos and language laboratories have been used in classrooms and they are still used. The ancestors of e-learning were teaching machines which were originally special mechanical and electron machines, later based on higher electronic components. Educational software that was based on the theory of programmed learning was later applied on the computers. The main reason of a small extension into practice was the economic cost and also low readiness of a sufficient number of quality didactic software developers (Květoň, n.d.). Education on personal computers (PC) began to develop in the 1980s when Computer Assisted Language Learning (CALL) emerged (the use of computer technology is referred to as Computer Aided Instruction - CAI); using computer-assisted materials became very popular and common in language teaching. Learners reacted to the stimulus given by the computer and carried out different tasks, such as gap-filling, matching and multiple-choice activities, with feedback on their performance provided by the computer. E-learning started only with the development of the Internet and the Web after 1993 (Květoň, n.d.). In the 1990s, Technology Enhanced Language Learning (TELL) appeared as a response to the opportunities offered by the Internet and web-based tools.(Dudeney and Hockly, 2007: 7). The terms Internet, Net, Web are often used interchangeably, though Chinnery (2005: 10) distinguishes between the Internet and the Web. "The Internet is a network of networks

connecting computers all over the world, allowing them to share information using a variety of languages or protocols. The Web is a section of the Internet that uses a special format called HyperTextTransfer Protocol to transfer information." The Internet became a resourceful element in ELT and with its entry into the learning process, the phenomenon of e-learning arose (Vančová, 2007: 25). The Council of Europe supported the use of ICT technologies from 1989-1996 with the project focused on modern languages education: "Language Learning for European Citizenship". One of the conclusions stressed that ICT development has been the strongest factor in the globalisation of modern life in recent decades (Hanzlíková, 2001: 169).

3.2 E-learning definitions

There is not just one way of defining e-learning, there is a number of different definitions and terms to describe the use of technology in education: online learning, web-based learning, web-based training, e-learning. It is fundamentally defined as learning facilitated through information and communications technologies (ICT), the implementation of which has recently played an important role in the field of language for specific purposes education. The American Society for Training and Development defines e-learning as the entire group of technology-based learning, covering a wide set of applications and processes that include computer-based learning, web-based learning, virtual classrooms and digital collaboration. It is delivered by electronic means including the Internet, intranet, satellite broadcasting, audio, video, interactive television and CD ROM (About e-learning, 2013)**.** On the contrary, Rosenberg (2008, in Černá 2005: 35) claims that CD-ROMs and DVDs should not be classified as e-learning for their lack of networkability. Zlámalová (2008: 129) defines e-learning as a multimedia support of an educational process with the modern information and communication technologies usage. It is realised by means of a computer network and its basic task is to provide unlimited access to education without the normal constraints of classroom time and space. When the e-learning course is realised, it functions as a support of the educational process. Her definition indicates practical realisation, which is close to our definition. Barešová (2003: 27) defines e-learning very simply, as an educational process with the use of information and communication technology. In our opinion this definition is too wide and broad and does not reflect the basis of e-learning as a method through which an educational process is

realised. In Pedagogical Dictionary (Průcha, Walterová and Mareš, 2001) e-learning is defined as the determination of different kinds of learning supported by computers, usually using modern technological means - particularly CD-ROM. Electronic learning is spread in the spheres of both distance education and corporate education. Garrison and Anderson (2003: 2) view e-learning as learning that is facilitated online through network technologies. "E-learning is networked, online learning that takes place in a normal context and uses a range of multimedia technologies.". They point out that the essential feature of e-learning extends beyond its access to information and builds on its interactive and communicative features.   E-learning of the 21st century is seen as as a new "ecology of learning". The authors characterise it as the technology transforming educational institutions, comprehension of teaching and learning and experience. They stress the uniqueness of e-learning as it consists in the control and responsibility for self-learning, in the art of critical thinking, in the managing of our own learning, constructing knowledge, and in the interaction, the result of which is various skills and knowledge. It supports both synchronous and asynchronous communication ranging from texts, through visuals to voice. The educational advantage is its capacity to support reflective text-based interaction, independent of time and distance. The authors speak about the so called value-add of e-learning that is created by an integrated social, cognitive and teaching environment (community of inquiry). The philosophical perspective of their comprehension reflects a constructivist view of teaching and learning (see 4.2.2 Constructivism). According to Fedyunina (2006), e-learning is a complex process the basis of which is a special pedagogic approach to learning. Methodology of effective e-learning should be based on the following criteria: engaging learners in the learning process, encouraging independent learning skills, developing learners´skills, and motivating learners. She mentions that universities make investments in e-learning because they realise that it is borderless education, there is high demand from students, and a growing competition for students on the global education market. The potential of e-learning is seen in six key dimensions:

- Connectivity – access to information
- Flexibility – learning any time, at any place
- Interactivity – assessment of learning can be immediate
- Collaboration – discussion tools supporting collaborative learning
- Extended opportunity – e-content reinforces and extends classroom-based learning

- Motivation – it can make learning fun

E-learning is defined as learning facilitated and supported through the use of information and communications technology; it occupies the central position in self-access. E-learning can be used as *supporting learning* for existing courses, *blended learning* as combination of traditional and electronic practice and *fully on-line learning* (Fedyunina, 2006: 316).

Additionally, in her study, Frydrychová Klímová (2006) agrees that computers and other new technologies have become an important aspect of foreign language learning. She stresses that e-learning substantially contributes to increased effectivity of the educational process and defines e-learning as "using new multimedia technologies and the Internet to improve the quality of learning" (Frydrychová Klímová, 2006: 318). Jana Hronová (2010: 8), in her diploma work, defines e-learning in a broader sense. She views it as a new and modern concept of education and as a means by which we can educate ourselves outside of the traditional classroom setting. Nevima (2012: 427) states that "E-learning can be characterised as electronic education which uses information and communication technologies in order to increase education quality and efficiency". He points out that nowadays students can have easier access to e-learning through utilising the opportunity to connect the Internet with a mobile phone. He sees e-learning as an efficient form of education because students do not lose continuity in subject-matter in case they are ill for a long time.

Dita Gálová (2006: 321) focused on the need to cope with the low number of teaching hours by means of electronic support. At the same time, the new forms of delivery and methodology may help make learning more attractive and effective. University students often have different input knowledge in language skills. In traditional courses, it can be challenging to adjust the level and speed of progress to individual students which is why ICT is an ideal solution for ESP courses, too. Zounek (2009) comprehends under e-learning the theory of e-learning and empirical research the aim of which is to get to know, for instance, if a certain technology solution is proper or improper, or what the view of students or teachers on the ICT usage is. It means that he does not narrow e-learning only on practical question of the implementation of modern technologies into education. Hronová (2011) mentions Wagner´s definition of e-learning as an educational process, which uses information and communication technologies for the courses development, for

study material distribution, for communication between students and pedagogues, and to manage the studies.

Another definition of e-learning refers to "learning that takes place using technology, such as the Internet, CD-ROMs and portable devices like mobile phones or MP3players." (Dudeney and Hockly, 2007: 136). Dudeney and Hockly (2007) mention the following terms associated with e-learning that are often used interchangeably and can be confusing: **online learning** is learning that takes place via the Internet, and is understood here as a facet of e-learning. Another term is **distance learning** which comprises learning via technology, and hence, the newer term of e-learning is used nowadays. The next term is **open learning** that is connected with the degree of learners´ idependence and is comprehended as one aspect of distance learning. The last term is **blended learning,** which is a mixture of face-to-face and online learning. These words are all associated with e-learning in the sense of online teaching and learning.

As we could see, the literature offers a number of definitions, multiple terms and concepts, which reflect authors´cultural, educational and institutional backgrounds. Some definitions focus on technological aspects, some more on the educational process of learning.

3.3 Advantages and disadvantages of e-learning

We agree with the opinion of Růžičková (2009: 7) that even though e-learning is becoming increasingly popular, there also could be opponents to it, so it is important to define advantages and disadvantages of the method - at least generally. E-learning is a good way to encourage students to practice the language and it enables them to adjust learning to their individual needs and time requirements (Vančová, 2007; Dudeney and Hockly, 2007; Galavis, 1998). It seems to be useful for adults and older students, i.e., for distance students and students of lifelong education. They are aware of their own aims, they like the chance to work in their own pace and independently. From the psychological point of view, it is sometimes easier for adults to learn languages without being followed and observed by their colleagues during the lessons because they are afraid of making mistakes in front of their colleagues. Hence, they welcome the chance of this self-study opportunity. Because of this, we would also like to offer ESP e-learning course for these students other than full-time students. As Garrison and Anderson (2003) point out, e-learning is in the centre of attention of educational institutions and is recognised as a so called strategic

asset. The priority of lots of educational institutions is the transformation of lessons by means of e-learning whether it concerns distance studies or full time studies. The support of new technologies in the lessons with strategic integration of e-learning together with continuous lifelong education enables educational institutions to ensure their leading position on the market of education. The interactive form enables students to be actively involved in the teaching process, and sometimes it is more attractive than language textbooks.

Galavis (1998: 29) focuses on one of the biggest advantages of e-learning - that "we can produce autonomous learners who control at least part of the learning process and become more disciplined". Many authors (Galavis, 1998; Garrison and Anderson, 2003; Růžičková, 2009) realise that it is motivating for students. Dudeney and Hockly (2007) and Růžičková (2009) further mention the possibility of the content being kept up-to-date. This is a potential benefit for asynchronous communication of students, who would have time to prepare replies so that communication would be more accurate. Videos, pictures and sound stimulate sight and hearing, which cannot be done by traditional resources (Galavis, 1998; Růžičková, 2009). Feedback within activities and in the form of tests is very important to the learning process (Růžičková 2009). Květoň (n.d.) emphasises the opportunity to study at any time and anywhere as long as there is access to a computer connected to the network. Sometimes students can study at their own pace - it depends on the schedule and requirements of teachers. He also mentions lower costs as an advantage of e-learning; however, initial costs for purchasing hardware and software can be high. Similar to Dudeney and Hockly (2007) and Růžičková (2009), he considers the chance to make any change to study materials in order to get topical information as a very significant advantage of e-learning. It is much easier to change study materials online than with printed material. Tests on computers are also considered a big advantage, because they are immediately assessed and teacher´s bias while evaluating exams is completely eliminated.

There are, however, also some disadvantages of e-learning. As far as disadvantages are concerned, we can mention the following opinions on this issue: some students are undisciplined when being independent students (Galavis, 1998: 28), some skills, such as speaking, are more difficult to practise online (Dudeney and Hockly, 2007: 182), students may feel isolated, there is the lack of socializing, computers do not provide the sense of

cooperation (Dudeney and Hockly, 2007: 182; Hanzlíková, 2001: 169; Galavis, 1998: 27). Růžičková (2009), on the contrary, mentions the cooperation of students and formation of study teams as an advantage of e-learning. Mallows (in Černá, 2005: 50) holds the same opinion that "the success of collaboration relies upon the ability and willingness of co-learners to share resources and accept the importance of the contribution of their peers". Even in asynchronous communication via email, learners can cooperate and express emotions by means of emoticons and varied punctuation (i.e., exclamation marks). Other problems that could arise with e-learning include technical issues, which may cause accessibility problems. Additionally, proper equipment is necessary and learners are dependent on access to the requisite hardware and software (Dudeney and Hockly, 2007: 182; Růžičková, 2009: 7; Vančová, 2007: 27). Some students are reluctant to ICT usage (Barešová, 2003: 33) and some are unable to learn individually because they are heavily dependent on the teacher who provides direction, encouragement and feedback (Černá, 2005: 50). E-learning is not useful for certain types of courses such as those that include experiments and demonstrations (Růžičková, 2009: 7). Vančová (2007) also mentions the limitation of e-learning with elderly people or visually or aurally impaired students, who do not find e-learning suitable for them. Květoň (n.d.) also found some disadvantages that could play a role when considering e-learning implementation, such as the absence of personal contact (but on the other hand the possibility to use chats, discussion forums, etc.), problems of elderly students´ ability to use modern ICT. And similar to Galavis´(1998) opinion, he thinks that some students can have the feeling that the lessons are voluntary activity because they need not attend the lessons.

Advantages and disadvantages of e-learning are not fully exhausted here as many more pros and cons for the implementation of e-learning can be researched.

3.4 Our determination of e-learning: ESP e-learning

ESP e-learning is a term introduced in our dissertation, based on the fact drawn from our experience that nowadays, nearly every university of non-philological orientation tries to provide e-learning courses of English for specific purposes (ESP) for their students (see Chapter 6). ESP e-learning courses are being developed in the globalised world in response to the labour market and the needs of educational institutions. They are either purely online courses or blended courses with the support of e-learning. This phenomenon was named

ESP e-learning. ESP e-learning courses provide added value to the study at universities. In our opinion, ESP e-learning covers the following aspects: ESP that is viewed in complexity as teaching/learning the English language based on the content that is not contextualised and that is related to subject specialism and learners' needs, and e-learning as the online support of an educational process, and as the method through which the ESP course is implemented. Under the content, we understand the knowledge not only of grammar and terminology, but also the knowledge of elements and definitions of a subject-matter (economic and business concepts).

We have also experienced that teaching a specialist language through e-learning requires special preparation for language teachers and thus a specific methodology that needs to be applied. In ESP e-learning methodology, language learning, subject learning and e-learning approaches are integrated. Consequently, even the nature of interaction between teachers and learners is different from that in teaching General English. It is desirable for the teacher to have some knowledge of a subject-matter, however he/she is more of a language consultant and his/her other roles are specified through e-learning method (see 3.6). Students have usually more expertise in the subject-matter than the teacher.

In our project, ESP e-learning is delivered via the Moodle LMS, an open source programme that is provided free of charge. It is a web-based platform on which the course content can be stored and then accessed by students. We used the best known authoring tool called Hot Potatoes that allowed us to develop the material in an electronic format that could be stored in Moodle. It is a small Windows programme, by means of which we created interactive exercises; they can be freely downloaded for educational purposes (see 7.2.2)

3.5 Role of a teacher in ESP e-learning

As Harmer (2001) points out, the role of a teacher depends on what the teacher wants for his/her students to achieve; the teacher should be able to switch between various roles and be aware of how to carry them out. The role of teachers changed in the history of language teaching with the change of teaching methods. As Richards and Rogers (2001) mention some methods depend on the teacher as a source of knowledge, others see his/her role as a consultant, guide, counsellor etc. Similarly, Vančová (2007: 19-21) describes different roles of teachers in relation to different teaching methods. She exemplifies the role of

a teacher as a source of knowledge and a controller in Grammar-Translation Method; the role of a prompter, guide and organizer in the Direct Method; the role of a native-speaker in Audio-Lingual Method; the role of a facilitator, organizer, guide, researcher, assessor and manager in Communicative Language Teaching; and the role of a counsellor and psychologist for example in Suggestopedia. Some of the roles of teachers are also specified and presented in the Common European Framework of Reference for Languages (CEFR). The issue of what roles the teacher should adopt during individual, pair or group working has been raised there. Should the teacher supervise and maintain order, monitor, counsel, function as a facilitator etc.? Actions of teachers reflect their attitudes and abilities and teachers present role-models which students can follow in their future use of the language. The roles stated in the CEFR include a manager (classroom management skills), a researcher (ability to engage in action research), the ability to reflect on experience, ability to handle testing, assessment and evaluation, ability to develop students' aesthetic appreciation of literature, ability to deal with individualisation within classes containing diverse learner types, ability to teach sociocultural background information (CEFR, n.d.: 144)

As far as the ESP teacher is concerned, much debate has been centred around the question of whether the ESP teacher must understand the subject matter of ESP materials. Hutchinson and Waters (1987: 163) claim that ESP teachers needn´t have specialist subject knowledge but just the knowledge of the fundamental principles of the subject-matter and that they should have a positive attitude to the ESP subject-matter. The authors mention that the knowledge of teachers of the subject-matter is not static and that it has been developing in the course of the lessons by teaching the subject materials and talking to students. Sometimes ESP teachers become students of the subject-matter. A similar opinion on ESP teacher´s subject-matter knowledge is expressed by authors Kennedy and Bolitho (1984: 138) that ESP teacher "may have to develop a working knowledge of his students´subject". In e-learning, in our case in ESP e-learning, the terminology used is not consistent (Vančová, 2007: 29). She distinguishes the term of a teacher for the classical classroom setting and the term of a tutor for e-learning. The term of a tutor is characterised as a consultant and advisor (Zlámalová, 2008: 28). Besides a tutor, the terms such as an on-line tutor, on-line instructor, e-coach, e-educator, e-teacher are used (Vančová, 2007: 29). At the school setting, a tutor is at the same time an author of the course, pedagogue,

technician, and manager of the course (Růžičková, 2009: 10). The roles of the teacher in the traditional classroom and in e-learning overlap. This fact is mentioned in the dissertation by Černá (2005: 70) in the chapter on tutor´s roles. In her classification of online tutor roles, the roles such as facilitator, counsellor, manager, researcher etc. concern both the teacher and the tutor. On the other hand, the role of a technologist (Vančová, 2007) who will be able to provide students with technical support is typical of a tutor. Hutchinson and Waters (1987: 163) pointed out that ESP teachers should become interested students of the subject-matter and require a knowledge of the fundamental principles of the subject-matter. Other roles of ESP teacher are the roles of a course designer and materials provider, collaborator with subject specialists and evaluator of the course (Dudley-Evans and St John, 1998: 13; Hutchinson, 1987: 164). Dudley-Evans and St John (1998: 13) use the term "practitioner" to stress that ESP work includes more than teaching. They also mention the role of the ESP teacher as a researcher (for instance carrying out needs analysis) who has to be able to incorporate the findings of the research into the course. In case of e-learning for distance students Albrecht (2006) mentions the role of a tutor, in blended learning it is a teacher or an instructor. He also stresses that the role of a teacher/tutor in e-learning is demanding. The implementation of e-learning cannot be considered time saving and efforts saving for pedagogues. Conversely, there are more duties and activities necessary for successful e-learning course running, whether it is 100% online course or only online support to full-time lessons. The teacher has to strengthen his/her role of a facilitator, be able to encourage the students, motivate them throughout the whole duration of the course. He/she should promptly react to contributions in discussions, promptly assess online homework, tests and do one´s best to meet students´demands. The online communication with students must be active and prompt. Weinstein (2001) states that teachers are also learners. They should respond to new circumstances, must manage their roles despite difficult conditions, analyse their experience, collaborate on projects, share ideas, lesson plans etc. Communities of teachers online can provide mutual support in fostering the development of adult literacies. ESP e-learning roles of teachers encompass the roles mentioned in connection with general English teaching, ESP teaching and e-learning as well.

To summarise, the role of the ESP e-learning teacher (tutor) is multidimensional and challenging. To illustrate an enormous range of teacher´s (tutor´s) roles, the following table with classifications of the roles of an online tutor is provided (Černá, 2005: 71).

Table 1: Classification of the roles of an online tutor

OTIS Discussion Group 2000	Mason 1991	Berge 1995	Harasim et al. 1997	Collins and Berge 1997	Rowntree 1999	Cox et al. 2000
Technologist		Technical		Firefighter	Organisational	
Manager	Organisational	Managerial	Planner	Administrator		Manager
Co-learner				Participant		
Designer			Group structurer		Structural	
Knowledge expert						Knowledge builder and resource
Researcher						
Facilitator	Intellectual	Pedagogical	Facilitator	Facilitator	Conceptual	Facilitator
Assessor						
Adviser/ counsellor	Social	Social	Guide	Promoter	Social	Guide
Tutor				Helper		
Mentor						

Source: Higgison, 2000 in Černá, 2005

3.6 Role of a student in ESP e-learning

The age of students is a major factor in teacher's decisions about how and what to teach because students of different ages have different needs, competences, and cognitive skills (Harmer, 2005: 37). Teachers at universities focus on adult students when preparing and planning the course. "Adults differ from "typical" or "traditional" students in that they bring a great deal of life experience and cognitive maturity to the classroom." (Hilles and Sutton, 2001: 386). Knowles (in Hilles and Sutton, 2001: 386) claims that adults have the need and capacity to be self-directing, i.e., to a certain extent direct their own learning. This is also stressed in the CEFR in connection to autonomous learning that is regarded as an integral part of language learning. Students are aware of the way they learn, the options

open to them and they opt for those that suit them best (CEFR, n.d.: 141). As Hilles and Sutton (2001: 387) mention, adult students are psychologically vulnerable, perhaps in a way that children are not. They can feel shame when the inadequacies in their results occur. It is associated with fears of failure, with the feelings of dissatisfaction and of social uncertainty. Teachers can diminish this fear and feelings by offering activities which are achievable (Harmer, 2005: 41). Adult students have their goals and reasons why they are learning, they have priorities that children usually do not have. They are at school because they want to be there (Hilles and Sutton, 2001; Harmer, 2005: 40). Other special characteristics of adults as noted by Harmer (2005: 40) include having expectations about the learning process, having their own set patterns of learning, tending to be more disciplined than younger learners, using more abstract thought and being more critical of teaching methods. Motivation of students is very important; it means a kind of internal drive which pushes students to do things in order to achieve something. Motivation caused by outside factors is called extrinsic motivation, for example, the need to pass an exam, financial reward, the possibility of future travel etc. Conversely, intrinsic motivation comes from the inside, for example, students may be motivated by the enjoyment of the learning process itself or by a desire to feel better (Harmer, 2005: 51).

Some students are better at languages, some are worse. It is very important when teachers are planning activities for students to be aware of the fact that in the class there are different individuals with different learning styles. In e-learning, the students are in the centre of teachers´ attention and teachers should make efforts to provide e-learning environment to meet students' professional needs, individual learning styles (visual, auditive, kinaesthetic, learning by activity, observing, imitation etc.) and the ability to learn at his/her own pace (Jurickova, 2012; Čechová, 2010; Albrecht, 2006). As Albrecht (2006) noted, e-learning brings new possibilities and represents a new environment but on the other hand it puts higher demands on the students. The students in e-learning need to have access to a computer and the Internet and also sufficient motivation to work in the e-learning environment. It is necessary for them to be prepared for work with information and communication technologies. Albrecht claims that for those students who are afraid to communicate with teachers face-to-face and express their views, online communication can be used to facilitate the formulation of their ideas and remarks and students are prevented from the feeling of social isolation. Moreover, asynchronnous communication

provides more time for thinking over the issue and formulation of questions and answers. In connection with ESP e-learning, attention is given to establishing communities of learners who support one another in learning the language. "Technology provides new opportunities for learners to build communities and break the boundaries. The examples are numerous and continue to grow as learners collaborate to compile and create knowledge" (Weinstein, 2001: 184). According to Johnston (in Černá, 2005: 47), online education allows for the development of learner´s autonomy as a precondition for successful e-learning. Autonomy, responsibility and discipline are key factors in the student-centred systems of teaching and learning. Autonomy is defined as "the ability to take charge of one´s own learning, which means to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning, …" (Holec, in Černá, 2005: 19). The degree of learner autonomy should be sufficient to meet the demands of lifelong learning, as the implementation of lifelong learning requires a high degree of autonomy of learners (Černá, 2005: 20).

4 ESP e-learning and related linguistics and learning theories

In this chapter, the relation of ESP e-learning to linguistic theories and to theories of learning is described. The theories provide theoretical bases for the methodology, and both are theoretical bases of the course design.

4.1 ESP e-learning and related linguistics theories

An English language course must be based on a solid foundation of the linguistic theory, especially that related to English for Specific Purposes, as well as the learning theory, specifically relating to online instruction or e-learning. (Strother, 2005; Hutchinson and Waters, 1987; CEFR, n.d.).

"Language description is the way in which the language system is broken down and described for the purpose of learning" (Hutchinson and Waters, 1987: 23). There is no single source from which the language course should take linguistic input. It is important to accept an eclectic approach. "All communication has a structural level, a functional level and a discoursal level. They are not mutually exclusive, but complementary, and each may have its place in the ESP course" (Hutchinson and Waters, 1987: 37).

 Our ESP language course derives its linguistic input particularly from the theory of language on registers and functional description of language with the input of philosophy and speech acts. They are not exclusive but complementary and each has its place in the course.

4.1.1 Register analysis - the concept of special/specific language

The concept of special (specific) language register analysis, was one of the phases in the development of ESP in the 1960s and early 1970s (see 2.2.1). It was based on the principle that one kind of ESP constitutes a specific register different from that of another kind of ESP − e.g. English of Electrical Engineering vs English of Biology (Hutchinson and Waters, 1987: 9). Bell (1981: 119) determines register as "a kind of sub-language or limited language described by correlating the linguistic forms in appropriate texts with situational variables". The whole language is then made up of a collection of registers (Bell, 1981: 119). Hutchinson and Waters (1987: 30) define register as "the kind of

language associated with a specific context, such as an area of knowledge (legal English; social English; medical English; business English; scientific English etc.), or an area of use (technical manuals, academic texts, business meetings, advertisements, doctor - patient communication etc.)." The aim of the register analysis is to identify the grammatical and lexical features of registers.

4.1.2 Functional view of language with philosophical inputs of speech acts

New ideas emerged in the study of language at the same time as the demand for English for Specific Purposes was growing. Traditionally, the aim of linguistics was to describe the grammar, the new studies focused on the ways in which language is actually used in real communication. Language does not exist for its own sake. Language can be looked at from the point of view of <u>function</u>, that is, what people do with it. Functions are concerned with social behaviour and represent the intention of a speaker or writer, for example, promising, threatening, classifying, identifying, reporting etc. (Hutchinson and Waters, 1987:31). This is not a new idea. At the beginning of the 20th century structuralism was combined with functionalism by the Prague Linguistic Circle (1926). The linguists were interested in the functional style, they examined the development of the language as the development of the system and they refused the study of isolated language features development (Mathesius, 1961). With regard to its classification of the language (langue/parole), chapter 5 is partly methodologically elaborated. The functional view of language began to have its influence on language teaching in the 1970s, when there was a move from language syllabuses organised on structural grounds to those organised on functional criteria. It was connected with the Council of Europe´s efforts to establish some kind of equivalence in the syllabuses for learning various languages and with the establishing of analytical philosophy that became dominant tendency with the so called "turn to the language". John L. Austin (1911 – 1960) became a key personality among Oxford philosophers who founded school of "philosophy of ordinary language"(Peregrin, 2005). Philosophy became interested in the nature of language. Simultaneously, the philosophers turned their attention towards the analysis of this language, a process that had a substantial impact on linguistics in the 1960s with Austin´s How to do things with words (1962) and Searle´s Speech Acts (1969). Bell (1981: 121) determines speech act as consisting of two elements: propositional content and the illocutionary force. Propositional content means what is being referred to.

Illocutionary force is the meaning that the act is intended to convey. These together give the speech act its social meaning. "If we inquire into the fiction of a piece of language, we are asking the question: what is language for?" (Bell, 1981: 119). It conveys ideas, information about the speaker, about the context in which the message is transmitted, referring to objects and concepts; it conveys our participation in the process of communication (Bell, 1981: 120). A functional approach provides students not only with the linguistic knowledge which permits them to create grammatical sentences (the linguistic competence), but also the social knowledge and skill which permit them to produce and understand socially appropriate utterances (the communicative competence) (Bell, 1981: 151). Philosophers provided insights which were of value to the linguists. (Bell, 1981: 113). For instance linguists Sager, Dungworth and McDonald (1980: 87) define a special text unit as "the product of a special speech act characterised by a certain kind of unity of topic, reference and syntactic cohesion and by a conventional form which organises the content of the message according to the particular intentions pursued." They state that intentions with which we use the language arise from the voluntary nature of language and that these intentions are part of human behaviour and are determined by the circumstances which surround speech acts. They define a speech act as "the result of the convergence of a speaker (or writer), a listener (or reader) and a topic (an area of reference), at a particular time and place in a specific situation." (Sager, Dungworth and McDonald, 1980: 22). The product of the speech act is a message consisting of text and intention. Every speech act takes place in a particular situation. The relationships created between participants through their interaction in a particular situation determine the message form appropriate to the particular speech act.

These theories of language are seen as complementary, with each supporting and enriching the other. Every ESP course should be relevant to learners´needs; that is why the theory of language based on registers and functions creates the basis of our course of Business English. Our aim was to produce the syllabus which gave the high priority to lexical features students are supposed to meet in their ESP (business and economic) studies and in future jobs (see course design), as well as to the language functions in particular business situations.

4.2 ESP e-learning and related theories of learning

Theories of learning provide the theoretical basis for the **methodology**, they help us understand how people learn (Hutchinson and Waters, 1987:23). Methodology is comprehended as the nature of the interaction between the ESP teacher and learners and it is different from that in general English lessons (Dudley-Evans and St John, 1998: 4)**.** On the contrary, Hutchinson and Waters (1987: 18) claim that there is no such thing as an ESP methodology and that there is nothing specific about ESP methodology.

E-learning methodology can be considered an innovation in the teaching of ESP in higher education. Nowadays, ESP instruction is very often implemented through e-learning and ESP e-learning methodology should reflect the underlying concepts and activities of the disciplines and professions it serves. The online course of Business English proved that ESP e-learning methodology is specific and a mere language methodology and content methodology in isolation are not sufficient for effective ESP e-learning**.** In our ESP e-learning methodology we consider language and content learning equally important. The lessons are based on thematic economic units with the use of content (subject-matter: economics, accountancy, management etc.) for the language practice. The language is taught through subject-matter texts and through various activities for mastering the specific language as well. Students have to master the language and also have the basic knowledge of subject-matter in the unit. In the Content and Language Integrated Learning (see 2.2.4), a specific language is a means for mediating the subject-matter in context so that while students learn curricular content they also learn an additional language. Subject dictates the language demands. In ESP e-learning, subject-matter is a means for learning specialist language and at the same time the students learn basic notions of their disciplines and professions.

The relevant theories of learning implied by the activities in our course and providing the bases for ESP e-learning methodology are behaviourism and constructivism, supplemented by our own teaching experience.

4.2.1 Behaviourism

The psychology of the Behaviourist School – Pavlov, Thorndike, Hull and Skinner – provided the model of learning based on behaviourism. Since language is a human activity,

it was believed that learning a language was achieved on the basis of a stimulus – response chains (Bell, 1981: 96). It is the theory of learning that says that learning is a mechanical process of habit formation and proceeds by means of the frequent reinforcement of a stimulus – response sequence (Hutchinson and Waters, 1987: 40). The basic exercise technique widely used in ESP is pattern practice, particularly in the form of language drills. Frequent repetition is essential to effective learning and all errors must be immediately corrected.

It provides the theoretical underpinning of ESP e-learning. The computer provides the stimulus, the learner has to do as directed, i.e., provides the response, and finally, the computer provides the feedback and reinforces the response. Providing feedback is connected with e-learning activities. Feedback is provided by both factors, the computer and the teacher. Timely provision of feedback is a key to success in computer mediating communication (CMC). "Online learning activities accompanied by the provision of feedback represent tools for structuring the process of e-learning." (Černá, 2005: 61).

4.2.2 Constructivism

Constructivism is a learning theory that underpins the methodology according to which knowledge is actively constructed by the individual. A constructivist view of teaching and learning is associated with the work of John Dewey who identified two principles that are reflected in e-learning. One is interaction through which ideas are communicated and knowledge is constructed and confirmed. The second principle is continuity which goes to the importance of creating the foundation for future learning. It means that e-learning must provide experience that ensures continuity for new learning experience (Garrison and Anderson, 2003: 13). The same reference to constructivism as to the learning theory that underpins the methodology of learning online is found in the book Language Learning Online: towards best practice. The constructivist approach requires learners to take responsibility for their own learning, either individually or collaboratively. Knowledge is seen as something that must be constructed (Nesi, 2011). Emphasis is placed both on the interactions of the individual with the environment and on how the mind constructs knowledge. Dewey viewed reflection as "an instrument that can be used to reframe problems in a variety of ways to obtain a range of possible solutions" (Blázques, 2007: 26). The new perspective of constructivism, known as social constructivism (Blázques, 2007:

28) considers the act of learning to be more than the construction of new meanings, it involves cognition as well as feelings. Teachers' beliefs emerge from a complex of social and individual influences, including their own experience, educational theories, their relationships with their students, colleagues and superiors. The social element implies that the social constructivist perception recognizes collaborative dialogue to be central to the process of experiential and attitudinal growth of teachers.

Of great importance is a pedagogical side of e-learning that is based on constructivism. Constructivism, a wide stream in behavioural sciences and in social science, emphasizes both the active role of the subject and the importance of its inner prerequisites in pedagogical and psychological processes, and also the importance of interaction with the environment and the society. (Průcha, Walterová and Mareš, 2001). The process of knowledge construction is not dependent only on the type of information and on the way it is transferred, but also on the topical state of cognitive development of the subject. According to Harasim et al. (in Černá, 2005: 36), network (online) learning is the process "in which the learners construct knowledge by formulating ideas into words that are shared with and built upon through the reaction and responses of others." Collaboration and construction of knowledge are shown to be inherent components of e-learning in the social constructivist learning theory.

To conclude, it is wise to take an eclectic approach for the methodology, taking what is useful from each theory and trusting also in the evidence of your own experience as a teacher. (Hutchinson and Waters, 1987: 51)

5 Development of vocabulary and skills in ESP e-learning

In this dissertation, we also want to contribute to the methodology of ESP e-learning through the description of how skills and vocabulary in ESP e-learning can be practised and developed. Simultaneously, we provide examples of ESP e-learning activities that can be used for skills and vocabulary development based on literature sources and on our own experience.

Foreign language teaching is based on the Common European Framework of Reference for Languages (CEFR) that serves the overall aim of the Council of Europe as defined in Recommendations R (82)18 and R (98) 6 of the Committee of Ministers. This document is intended to foster communication among professionals working in the field of modern languages and describes what language learners have to learn in order to use a language for communication as well as identifying what knowledge and skills they have to develop in order to be able to act effectively (CEFR, n.d.: 2).

The document defines single competences, particularly communicative and general ones, as final competences of language teaching. The general competences of language learners (CEFR, n.d.: 101) consist in their knowledge, skills, existential competence and their ability to learn. Academic knowledge in a scientific or technical educational field and empirical knowledge in a professional field have a significant role in the reception and understanding foreign language texts relating to those fields. Communicative competence as a complex aim of language teaching can be achieved on the condition that the teaching programme will correspond to the needs of students. The term of communicative competence was introduced by sociolinguist Dell Hymes in 1972 (Hedge, 2000: 45). He believed that the ability to communicate should be developed through language teaching. Moreover, he was concerned with social and cultural knowledge which students need to acquire to understand and use linguistic forms. As Tůma (2012) mentions, communicative competence consists of several components. According to different researches, the number and definitions of these components vary. Canale and Swain (in Tůma, 2012) divide this term into four components: grammatical competence, sociolinguistic competence, discourse competence and strategic competence. Bachman (in Tůma, 2012) divides communicative competence into knowledge structures, language competence, strategic competence, psychophysiological mechanisms and the knowledge of the situation.

Communicative competence is defined by the set of language knowledge and skills that enable the speaker to realise various communicative needs in connection to the situation and characteristics of listeners (Průcha, Walterová and Mareš, 2009). Communicative language competences enable a person to act using specifically linguistic means. According to the CEFR, a communicative language competence comprises linguistic components as well as sociolinguistic and pragmatic ones, and each of them includes different knowledge and skills.

Linguistic competences include lexical, grammatical, phonological knowledge, as well as skills – speaking, listening, reading, writing – and other dimensions of language as a system (CEFR, n.d.: 109). This component concerns the range and quality of knowledge, the way this knowledge is stored (the various associative networks in which the speaker places a lexical item), and its accessibility (activation, recall and availability). Sociolinguistic competences concern the sociocultural conditions of language use (CEFR, n.d.: 118). This component affects all language communication between representatives of different cultures through its sensitivity to social conventions (norms ruling relations between generations, classes and social groups, rules of politeness etc.). Pragmatic competences refer to the functional use of linguistic resources (production of language functions, speech acts) (CEFR, n.d.: 123). It also concerns the mastery of discourse, cohesion and coherence, the identification of text types and forms. The communicative language competence is activated in a number of language activities: reception, production, interaction, mediation (interpreting or translating). Reception (CEFR, n.d.: 65) includes silent reading and listening, which are also important in many forms of learning (understanding course content, consulting textbooks, works of reference). Production (CEFR, n.d.: 57) includes speaking and writing; it has an important role in many academic and professional fields (oral presentations, written studies and reports), and it is connected with a particular social value of judging material that is submitted in writing or fluency in speaking and delivering oral presentations). Interaction (CEFR, n.d.: 73) includes speaking and listening of two or more interlocutors simultaneously. It can comprise also written exchange in which production and reception alternate. Learning to interact involves not only learning to receive and to produce utterances, but also forecasting the remainder of the speaker´s message and preparing an appropriate response. High significance is attached to interaction in language use and learning because of its central role in

communication. Mediation of language makes communication possible between persons who are unable to communicate with each other directly (CEFR, n.d.: 57). It includes translation or interpretation, a paraphrase, summary or record that provide a reformulation of a source text to which the third party does not have direct access. In practice, the skills and language forms are processed in detail for the purposes of practical teaching/learning in ESP textbooks. However, theoretical literature on vocabulary is sporadic and therefore, we can draw from a relatively narrow range of authors in the following parts 5.1 – 5.5.

5.1 Vocabulary in ESP e-learning

Our vocabulary, be it native or foreign, may keep growing throughout our entire lives. New meanings may be acquired for old words; new relations between words can be formed. Correspondingly, when we think of language, we almost inevitably think of words – vocabulary. And when we speak about language development, we tend to speak about the enlargement of our vocabulary. An important part of the speaker´s language competence is the ability to recognise that some words are ordinary while others are rare, exotic, specialist, technical and so on. The introduction to The Oxford English Dictionary (OED) (1989) presents the following concept of vocabulary. The vocabulary of English is not a fixed quantity with definite limits. It is rather a nebulous mass with its clear and unmistakeable nucleus which spreads to all sides (OED, 1989). Thus, in the middle, we find common vocabulary which is enriched by colloquial, literary vocabulary and slang. Distancing from the core common vocabulary, we will find foreign, dialectal, technical and scientific vocabulary.

In recent years, it has been argued whether or not specialist vocabulary should be taught. The study of vocabulary has been given a minor focus in classrooms. This was partially due to the use of modern communicative approaches to foreign language teaching (Bramki and Williams, 2003). Mothejzíková (1988: 124) states that lexical items needed for a particular job are best learned in connection with the job or profession itself. "The field called English for Special Purposes (ESP) or Scientific and Technical English (STE) puts great stress on the specialized vocabulary connected with various professional or technical fields". Robinson (1980) says that textbooks do not need to concentrate on specialist vocabulary as the students will absorb it from the main course studies. However, the issue

is not whether to teach specialist vocabulary or not, but what strategies to apply to its teaching and learning. In their article, Bramki and Williams (2003) argue that we must consider the difference between development and recognition when teaching vocabulary. Vocabulary development refers to the teacher who deliberately and systematically expands the students' vocabulary by introducing word lists, dictionary exercises, functional grouping and the like. It is probably this deliberate, systematic expansion of specialist vocabulary that is regarded as being outside of the province of the teacher. In contrast, vocabulary recognition relates to the strategies that an efficient student/reader employs while reading a text. This way the reader works out the meaning of unfamiliar words that he encounters with in the text. However, it is up to the teacher to help the student/reader to acquire effective strategies which will enable the student/reader to understand the unfamiliar words or contexts. Those strategies are common to both specialist and non-specialist vocabulary. According to Bramki and Williams (2003), these strategies include guessing from context, cognate recognition and back-tracking a nominal compound in order to find functional inter-relationships of its constituents. Vocabulary recognition is in fact lexical familiarization. In their article, Bramki and Williams (2003) present examples of different categories of lexical familiarization. Exemplification provides the reader with an instance or instances of what the newly introduced term refers to. For instance *durable consumer goods* will be exemplified by the list of the following: books, furniture, TV sets, and domestic electric appliances. Explanation will provide the reader with a sequence of words equivalent or opposed in meaning to the newly-introduced term. For instance, *saving* will be explained as the act of foregoing consumption. They further mention definition and stipulation which indicate that the term being defined has its particular meaning only in a given situation and that it will not have the same meaning in different situations. Most dictionary or thesaurus entries may be regarded as definitions or stipulations. Finally, synonymy provides the reader with a more familiar lexical item with almost the same meaning. Thus, *laissez-faire* will be referred to as market economy for better understanding the unfamiliar term. (Kučírková, Vogeltanzová and Jarkovská, 2011)

ESP vocabulary e-learning activities:

- ❖ Matching (definitions, translation, collocation)
- ❖ Multiple choice
- ❖ Filling in the gaps

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❖ Cloze texts where every nth word is replaced by a blank
❖ Ordering jumbled words

5.2 Reading in ESP e-learning

Dudley-Evans and St John (1998: 96)) claim that one of the most important changes in the approach to reading in ESP is the shift from the text as a linguistic object to the text as a vehicle of information. The authors explain that extracting information is more important than a language study. In our opinion, both the focus on information and the focus on the language study are of the same significance. Good reading requires language and skills, poor reading in a foreign language is due to an inadequate knowledge of the foreign language (Dudley-Evans and St John, 1998: 96). Texts are chosen for their value in relation to students´ needs and it is common to find authentic texts for reading comprehension. They are defined by Morrow (1977: 13) as texts which have originally been produced for some purpose other than language teaching. According to Harmer (2005: 205), authentic material is a natural language used by native speakers. Authentic texts may be for example extracts from real articles or books, they are produced by a real writer for a real audience and designed to convey a real message. Texts are mainly chosen by teachers of languages together with a subject specialist, who should also contribute to the text selection. The criteria that are used for selecting texts usually relate to both the carrier and content of a given field of study. The act of reading is defined by Harmer (2005: 201) as the interaction between top-down and bottom-up processing. In top-down processing, the reader gets a general view of the reading passage. In bottom-up processing, the reader concentrates on individual phrases and achieves understanding by putting elements together to build up a whole.

Bocán (2012) points out that both silent reading and reading aloud should be taught in Foreign Language Teaching (FLT). The reason why silent reading should be taught is that outside of the classroom, people read silently more often than aloud (Hendrich et. al., in Bocán, 2012). Teaching of reading aloud is important and should be included in the lessons as well. While reading aloud, learners improve their pronunciation, accent, intonation, fluency and rhythm and teachers correct learners if needed. (Hendrich et. al., in Bocán, 2012). Bocán (2012) also points out that students should be engaged in both intensive and extensive reading. Intensive reading is about approaching the text under the guidance of

the teacher. It is less relaxed and dedicated to the achievement of a study goal (Harmer, 2005: 204). In e-learning, teachers act as feedback organisers, who usually check the results of completed tasks by learners. On the contrary, extensive reading is characterised as reading for pleasure purposes which is done in a leisurely way. It is the best way for students to develop automatic recognition of words when they see them (Harmer, 2005: 204).

Some of the key reading skills to be learnt are the following:

- ❖ Selecting what is relevant for the current purpose
- ❖ Identifying the topic
- ❖ Skimming for content and meaning, for general information
- ❖ Scanning for specific information
- ❖ Reading for detailed information (description of scientific procedures)
- ❖ Predicting, inferring and guessing
- ❖ Identifying organisational patterns typical of the register
- ❖ Interpreting texts (readers are able to understand what the writer is implying)

(Dudley-Evans and St John, 1998: 96; Harmer, 2005:202)

In ESP teaching, the interaction should include teacher's questions, students´ response, teacher's evaluation, students´ evaluation of each other etc. Follow-up activities could be comprehension questions and grammar and lexis exercises. In ESP e-learning the reading activities are for instance the following:

- ❖ True-false responses
- ❖ Multiple choice responses
- ❖ Filling in the gaps with the offer of words
- ❖ Cloze texts where every nth word is replaced by a blank
- ❖ Reordering jumbled paragraphs (sentences, words)
- ❖ Matching terms and their definitions

  (Čechová, 2010: 53, Harmer, 2005: 220; Mothejzíková, 1988: 169)

5.3 Listening in ESP e-learning

Learning the language depends on listening which provides the aural input that functions as the basis for language acquisition and thus enables the learners to interact in spoken communication. There are several listening strategies, or techniques, that contribute to the listening comprehension and remembering listening input. The strategies can be classified into two groups depending on how the listener/learner processes this input. The two groups include top-down strategies and bottom-up strategies (The National Capital Language Resource Center, 2004; Ždímalová, 2011b). The top-down strategies are listener based. This means that the listener makes use of background knowledge of the subject-matter topic that is also called pre-existent knowledge of the world (Cook, in Harmer, 2005: 199), or it is referred to as schema (Harmer, 2005: 199), the situation or context, the type of text and last but not least, the language. Among the top-down strategies there is listening for the main idea, predicting and drawing inferences. With the help of the background knowledge the listener can interpret what is heard and even anticipate what will come next using the above-mentioned techniques.

In contrast to the top-down strategies there are the so-called bottom-up strategies which are entirely text-based. They include listening for specific details and recognising words and word-order patterns. Bottom-up strategies indicate that the listener relies on individual words and phrases and achieves understanding by stringing these elements together to build up a whole (Harmer, 2005: 201). Both kinds of the listening strategies can be successfully combined. In class, it is up to the teacher to monitor which strategies or their combination was effective, and whether the students achieved their listening comprehension goals using these strategies.

Before starting any listening comprehension, the teacher should decide which strategy or combination would serve best in a particular situation. This means activating the students' background knowledge of the topic in order to predict or anticipate content. The combination of selected strategies should include both top-down and bottom-up strategies to increase the students' listening confidence (Kučírková, Vogeltanzová and Jarkovská, 2011).

In English for Specific Purposes, specifically in English for Academic Purposes and in English for Business Purposes, listening to monologue, i.e., listening to lectures, seminars,

business presentations etc. is particularly important. The following skills are necessary for effective listening comprehension of monologue:

- ❖ Identifying the purpose of monologue
- ❖ Identifying the topic
- ❖ Recognising key lexical items related to the subject/topic
- ❖ Guessing the meanings of unknown words from context
- ❖ Understanding the role of logical connectors
- ❖ Listening for gist (for general understanding)
- ❖ Listening for specific information

(Dudley-Evans and St John, 1998: 96)

Listening done in the classroom is called intensive listening. It is less relaxed and supplied by the teacher. Intensive listening can be used for general understanding or comprehension or for language items (Hanušová, 2011: 12). Teachers use taped materials when they want the students to practise listening skills. One advantage of using taped material is derived from the fact that such material enables students to hear a variety of different voices. However, one disadvantage is that everyone needs to listen at the same speed (Harmer, 2005: 229). If we want students to benefit from listening, we should play the tape at least two times because students feel more secure and confident with each listening, as they understand more and more. Good listening is important also in spoken interactions, i.e., in situations where listening and speaking are both required within the real time of the communication (Dudley-Evans and St John, 1998: 106). Harmer (2005: 230) calls this "live" listening. A distinct advantage is that speakers can ask for clarification and repetition. On the contrary, extensive listening is for pleasure because students choose for themselves what they listen. The more they listen, the more language they acquire (Harmer, 2005: 204).

In ESP e-learning, the listening activities could be based on listening through Moodle recordings or on listening to the news and videos on web pages, like YouTube. Potential e-learning activities could be the following:

- ❖ Putting words/ sentences/pictures in the correct order
- ❖ True-false responses
- ❖ Multiple choice responses
- ❖ Filling in the blanks

❖ Completing half-finished lines (after listening to the song) etc.

(Harmer, 2005; Kučírková, Vogeltanzová and Jarkovská, 2011)

5.4 Writing in ESP e-learning

In writing academic or professional texts, the key element seems to be the knowledge of the register/genre. It involves an understanding of the expectations of the discourse community that reads the text and understanding of the structure and the language of the register. Developing writing skills involves also planning, drafting and revising, and writers should have the needs of readers and the purpose of the document in mind. (Dudley-Evans and St John, 2005: 115). The approach to the teaching of writing that is associated with the development of register analysis is the social constructionist approach (Dudley-Evans, St John, 2005: 114). Writing is a social act and it is connected with the context in which we are writing. Work on various registers such as academic article, dissertations, business letters etc. shows the regularities of writers' communicative purpose in certain registers and encourages writers as far as their role as members of a discourse community is concerned (Dudley-Evans, St John, 2005: 118). Writing skills based on this approach include:

❖ Developing rhetorical awareness by looking at model texts
❖ Practising specific register features
❖ Carrying out tasks showing awareness of the needs of individual readers and the discourse community and the purpose of writing
❖ Evaluating writing through peer review or reformulation
   (Dudley-Evans and St John, 2005: 118)

There are a lot of activities that can be done in writing practice such as dictations, writing reviews, writing a story, report writing, letter writing etc. Harmer (2005) presents the following writing skills in the process of writing:

❖ Drafting a piece of writing
❖ Ordering information
❖ Reviewing, assessing impact
❖ Generating more ideas
❖ Evaluating

❖ Studying texts in the register (before starting own writing – for instance business letters)

Computers can be useful writing tools in ESP e-learning. E-learning writing activities, which can be corrected by computers, are for instance the following:

❖ Filling in the blanks

❖ Punctuating a text (capital letters, commas, full stops)

Any longer texts or assignments (for instance a business letter) produced by learners will have to be sent through **email,** corrected and marked by the teacher and again returned by email (Dudeney and Hockly, 2007: 64). Email can be used for commenting on students´ writing, translations, and also for student-to-student peer commenting. The advantage of email manifests itself in asynchronic communication as it is not necessary for a teacher and students to be connected to computers at the same time. It is one of the most used and useful ICT tools around today. Writing emails gives a learner more exposure to the target language, and the interaction is real in the sense that learners are writing to real people – either the teacher or other learners – using a real medium. Email speeds up communication and particularly distance studies are dependent on effective communication through information and communication technologies. It also gives the chance for students to carefully contemplate responses and tasks (Dudeney and Hockly, 2007: 62). A set of guidelines for appropriate behaviour for specific forms of computer mediated communication (CMC) such as e-mail and discussion groups is called Netiquette. The emphasis is placed on tolerance, sensitivity to different manners of other cultures, politeness, and awareness of one´s own responsibility when communicating via the Internet (Čechová, 2005: 28).

5.5 Speaking in ESP e-learning

Dudley-Evans and St John (2005: 105) use the term spoken interaction to cover situations where both skills, listening and speaking, are employed and required within the real time of the communication event. Effective spoken interaction includes the following skills:

❖ Active listening that includes verbal encouragement given to a speaker to show that we have been listening and understanding

❖ Questioning is a means of controlling communication

❖ One-to-one spoken interaction (telephone conversations)

- ❖ Building relationships - the term used by Dudley-Evans and St John (2005) that includes discussing business matters
- ❖ Turn-taking and handing over the floor in multi-spoken interactions

Spoken monologue, an oral presentation, is a feature of English for Academic Purposes and English for Occupational Purposes. It concentrates on the prepared talk accompanied by visuals. For many business people the presentation in a meeting is a common event (Dudley-Evans and St John, 2005: 112).

Spoken interaction and spoken monologue could be included within ESP e-learning activities that are for instance as follows:

- ❖ Chat - it is a tool that allows for synchronous, i.e., real-time communication over the Internet. Chat programmes currently available for text chat and voice chat as well, are the Skype and the ICQ.
- ❖ Video and audio conferencing allowed through NetMeeting programme or Meeting Space programme

   (Dudeney and Hockley, 2007: 73)

It is used to connect learners at distance, however, Dudeney and Hockley point out that it is suitable for very small groups only. Therefore, it is not included in our e-learning course, which is intended for a huge number of distance students.

5.6 Translation as the fifth skill in ESP e-learning

Translation is referred to as a fifth (specific) skill or as a mediation activity besides interpreting, summarising and paraphrasing texts (CEFR, n.d.: 57). Even though it is not a target skill in ESP lessons, it is an important specific skill. Translation is a natural and necessary activity outside the classroom, as the translation process occurs in offices, banks, companies etc. It is the process of conveying messages across linguistic and cultural barriers (Duff, 1992: 5). According to Knittlová (2000: 148), in scientific style the primary is the purpose. Content is primary, the form is secondary. Students need to be able to communicate both ways: into (active translating) and from the foreign language (passive translating). The first task when translating is to produce concise and exact mediation of specialist (scientific, technical, economic etc.) information. The basic part of a specialist translation is terminology which is of a high informative content (Janata, 1999). In translating specialist texts, such as business contracts, legal documents, guarantees etc., the

translation should accurately reflect the meaning of the original text, nothing should be added or removed and the ordering of words should match the original as closely as possible. The translator should be acquainted with the given culture of a target language and more or less with a specialist field - this holds for students of particular fields of study. In specialist and scientific translations, the personality of a translator should be suppressed – using impersonal means of expression. (Duff, 1992: 10). According to Duff (1992: 7), translation is a useful language learning activity because: "Translation develops three qualities essential to all language learning: accuracy, clarity and flexibility. It trains the learner to search (flexibility) for the most appropriate words (accuracy) to convey what is meant (clarity)." Bahenská (2013) emphasizes the contribution of translation to the lessons of ESP, particularly to English for Academic Purposes.

In ESP e-learning, translation may be applied in the form of activities (concrete exercises) to practice business and economic terminology together with grammar that corresponds to impersonal means of expression, such as infinitive (Mothejziková, 1983), passive voice, noun compounds, gerund etc. ESP e-learning activities that could be corrected by the computer are as follows:

- ❖ Multiple choice - translation of single terms/collocations/sentences
- ❖ Matching the Czech term and the English one
- ❖ Translation cloze (Neumanová, 2002: 65)

Longer texts should be done as out-of-class work, written in Word and sent to the teacher via e-mail. The teacher corrects the text in a different colour, can add any suggestions of how to properly translate it and sends it back to the students. While translating independently, students can use online dictionaries.

To summarise, the teaching of skills should not be realised in isolation. Therefore, we have integrated the practice of more skills into single modules. Using one skill generally involves at least one more of the other skills (reading aloud involves listening, writing involves some reading, reading may lead to a follow-up letter etc. We agree with Dudley-Evans and St John (2005) who stress that skills are learnt more effectively when being taught in an integrated manner. For example, hearing the correct pronunciation of a vocabulary item helps store it in the memory and then retrieve it. Similarly, reading and hearing the text at the same time helps improve its understanding and pronunciation.

Having this in mind, specialist terms in every module have been recorded by a native speaker.

6 Literature review of the research in the field of ESP e-learning

Main studies related to the topic of our research have been described and summarised in this literature review. As noted by Seliger and Shohamy in their monograph "Second Language Research Methods" (1990), organisation of the literature review is determined by the nature of the research problem. In our case, the literature review is organised according to the topics related to ESP e-learning and according to whether the research has been conducted in the Czech Republic or abroad. Our findings in the field of ESP e-learning are based on the sources available on web sites of universities, in libraries, in journals available on the Internet such as the European Journal of Open, Distance and E-learning which presents scholarly work and solid information about e-learning as well as new dimensions of technology-enhanced learning. By covering all sectors within education and training, this e-journal promotes the work of researchers and practitioners in education in an electronic peer-reviewed publication. We also searched through educational journals in the Scopus database (in the subject area of Social Sciences and Humanities), and in the Journal on Efficiency and Responsibility in Education, and in other educational journals on English teaching such as Forum and ATE Newsletter. We also went through conference proceedings, particularly those that are in the Thompson Reuters database such as ERIE (Efficiency and Responsibility in Education), and also through handbooks of research in second language teaching and learning. Many of the sources emerged during the process of enquiry so it was significant to define the scope of the literature review, i.e., to set some boundaries. These boundaries can be determined by the relevance of the material to the study. The criterion for the relevance set by Seliger and Shohamy (1990) was maintained. One of the criteria for determining relevance is "the degree to which the content of the article is directly related to the topic of the research." (Seliger and Shohamy, 1990: 79). We concentrated on the **topics connected with our research such as ESP and e-learning, learning management system, autonomy, distance studies, interaction and e-learning course design effectiveness.** The literature available at the time of writing this dissertation was used. We made efforts for the literature review to be comprehensive, however, it is not possible to include everything ever written on the topic. The research that was conducted should add new information to the body of knowledge.

6.1 ESP e-learning research studies in the Czech Republic

The research on the use of commercial self-study software packages that are available on the Czech software market for upper-intermediate learners of English was conducted with ten students who were endeavouring to reach level B2 of the CEFR (Keller, 2007). The aim was to find out whether the self-study software could be a viable alternative to class-based education. Keller evaluated the packages in the context of adult learners and computer-assisted language learning as well. Respondents were given pre-study questionnaires before the installation of the software and post-study questionnaires after studies. Their experience with the self-study, basic computer skills and their motivation for learning English were examined in pre-study questionnaires. In post-study questionnaires, their satisfaction with the commercial software and the opinions on this type of study were investigated. The findings showed that none of the respondents had any experience with the language learning software and that they were mostly motivated to learn English for their job. They would prefer a dialogue based on interactions, they did not want to use the method of the programme and showed no inclination to continue their studies. Keller set criteria for software evaluation and came to a conclusion that none of the four language learning software packages could be generally recommended. The reason was the lack of social interaction, the lack of a comprehensive grammar reference, the lack of adequate feedback, the lack of advice on learning strategies and no opportunity to discover the learners´ existing knowledge. Moreover, independent language production was in very limited contexts. Keller´s research results claimed that a long-term learning progress using exclusively the current learning software was not likely and that the major obstacles to the learning progress were hard to remove. A conclusion was made that the need for social interaction cannot and should not be met by computer mediated communication. This conclusion is connected with obstacles remaining without any explanation. Therefore, we could raise a question on why it could not be met. We are convinced that social interaction can be met by computer mediated communication through e-mails, Skype or ICQ etc. The interaction is possible not through commercial software when all parts of the software, including the learning content, are stored in the computer itself, but through the Internet. In our research, we also tried to examine whether e-learning can be an effective alternative to the face-to-face instruction. Our research is not based on commercial software but on a

tailor-made e-learning course in the Moodle LMS (chapter 7.2). The author suggests the improvement in the form of the entry-test in which the current level, the learning style and strategies are determined. The solution in blended learning was pointed out. The developers should invest in this direction. This seems to be a good suggestion, but it would require close cooperation between software developers and language schools and agencies so that learners could use the software package and study with a proper teacher as well.

The topic of e-learning can also be found in the diploma thesis by Albrecht (2006), in which the situation of e-learning at the Faculty of Arts at the Masaryk´s University in Brno was examined. In the theoretical part, the concept of e-learning is outlined and the e-learning definitions are introduced. We agree with the author´s view that there is a huge dynamism in this field and that it is difficult to encompass and state all opinions and definitions. However in our view, his survey was not sufficient enough because he mentioned only four definitions of e-learning. In his view, e-learning is a process of education using information and communication technologies. That seems to be too wide a definition. He also concentrates on the advantages and disadvantages of e-learning in a more detailed way and stresses the importance of e-learning contribution to the sphere of education. These advantages and disadvantages are discussed without reference to other specialist literature. In the theoretical part, the functions of students and teachers (tutors) in the environment of online teaching, technological background of online courses, and also the procedures when producing study support materials are pointed out. At the end of the theoretical part, the problems of evaluation of e-learning courses are outlined. It is a good contribution to the whole framework of the e-learning concept. In the empirical part, e-learning at the Masaryk´s University is analysed, particularly three courses in the Moodle LMS. One of them concerns the English language in Interpreting. This e-course is a combination of e-learning and full-time studies. The objective of this analysis was the identification of distinctive elements of these courses and revealing possible mistakes. The outcome of the analysis is a recommendation and some advice for authors of e-courses. This part with the advice was inspiring for us when developing our own e-learning course. We believe that it would also be useful for other authors of e-learning courses.

Another diploma thesis that examines e-learning concerns the teacher in e-learning (Vančová, 2007). Firstly, the role of a teacher is analysed in general, and then that of the teacher of foreign languages based on the study of relevant specialist literature. The author comes to a conclusion that in contemporary teaching the liberal role of a teacher over the authoritative one prevails. Then the role of a teacher in e-learning, which requires specific skills for the educational process is focused on. Various definitions of e-learning, advantages and disadvantages of e-learning for various types of students and various types of courses are identified. In the next part, three different types of study materials are compared – a classical textbook, a self-study textbook and an online course. The textbooks and online materials from the point of view of the target, structure and content are analysed and evaluated. The main differences and similarities are presented and the role of a teacher in each study material is determined. The detailed analysis is completed with a table with the survey of skills and language means that can be developed within the studies from these teaching materials. The pedagogical research by means of questionnaires distributed to the teachers was conducted. The author examined the views of the teachers concerning their role in the teaching process, the students´views of the lessons run by teachers and those supported by means of computers. The research among teachers does not indicate whether the teachers had experience with the e-learning course. This information would be important for the interpretation of the research results owing to the fact that the aim of the work is the determination of the role of teachers in e-learning. The findings show that teachers are aware of the variability of their roles in the teaching process and confirm the roles stated in the theoretical part of the thesis. The author was not successful in addressing more students who study through e-learning. Therefore, the students of English who did not have the experience with e-learning had to be addressed. This fact probably also influenced the result of the research: students think that the lessons run by a teacher are the most proper way of studying and that the future of e-learning is only complementary.

E-learning and its practical use at primary schools in the Czech Republic and the EU countries was analysed by Hronová (2011). It concerns the e-learning awareness of pupils at primary schools, as well as of their parents. In the theoretical part, the author concentrates on the notion of e-learning, history, advantages and disadvantages, on learning management systems (LMS), in particular on Moodle, on e-course, Internet, web

pages and forms of teaching in e-learning. In the empirical part, research examination by means of questionnaires is described, data are analysed, results from the questionnaires are interpreted. Hronová (2011) comes to a conclusion and confirms the hypotheses. In the next two parts, the attitude of the EU and the CR to e-learning, and documents of the government information policy are described. These parts, particularly those on the EU and CR documents, should be logically included in the first theoretical part. Finally, Hronová tries to suggest the system of e-learning usage at primary schools for pupils and parents.

Černá (2005) deals with the information and communication technologies (ICT) in teacher education and attempts to discuss the aspects of the implementation of ICT into educational practice in the English Language Teacher Education (ELTE) Study Programme at the University of Pardubice. In the theoretical part, first of all, the current educational issues regarding lifelong learning are dealt with. Then the features of computer-mediated communication are focused and the concept of e-learning is clarified. Černá particularly concentrates on the educational potential of computer conferencing in general and in relation to teacher education. It is suggested that professional learning should be supported by this sort of technology, however, attention must be paid to the determinants of learning outcomes that have to be taken into consideration by educationalists. The aspects of tutoring online and reasons for introducing ICT into teacher education are focused on in the other parts. The example of integrating ICT into the Professional Development Module of the ELTE Study Programme is presented. It is achieved by designing an online learning environment MAT Forum. The research project then focuses on the implementation of the MAT Forum during the Clinical Year. The investigation was aimed at finding out whether the online environment could be used for professional learning of future English teachers. The research was focused on interpersonal interaction, not on learner-content interaction, and was conducted as a two-stage investigation through the use of multiple research tools and through quantitative and qualitative data analyses. Two groups of teacher trainees were involved in the investigation. The first consisted of 17 trainees and the second of 20 trainees. Research techniques used to gather data included statistics, content analysis, interview and questionnaire. Even if the number of trainees was given by objective conditions at the university, in our opinion the number of 17 or 20 with their contributions is a sufficient

amount for a pilot study but not for a research study as far as the quantitative analysis is concerned. Moreover, in the dissertation, the role of researchers who participated in the data collection should be explained in more detail. It was only stated that the members of the team went through standardising procedures before getting involved in the research. It is not clear which standardising procedures were applied. However, despite our comments, the dissertation represents a valuable original contribution to a current practice in the Czech context, the e-conferences provide extended opportunities for professional learning and facilitate it.

A considerable contribution to the role of information and communication technologies in the language studies of university students has been made by Čechová (2010). The dissertation concerns the issue of ICT application in the lessons of English when preparing the students for the STANAG 6001 examination at the Faculty of Economics and Management at the University of Defence in Brno. In the theoretical part, the lessons of languages in the defence sector and specifically at the University of Defence are described. The next chapter is devoted to basic EU and CR documents connected with ICT issues in language education. Furthermore, e-learning is defined and its advantages and disadvantages are specified. In the last two chapters of this part, communicative competences as part of language education and all the skills, particularly in connection with ICT usage, and the methods used in foreign language teaching are mentioned. In the empirical part, the author first describes the situation of language education at the University of Defence in Brno. The production of a teaching programme with Canadian partners which is used for the research of the ICT influence on the English language training is focused. Čechová (2010) cooperated with a commercial firm specialising in the research and development in the field of audio and video technologies. Another important part concerns the research methodology – hypothesis, population, methods of the research and the data analysis. The students´ views of the language lessons and the role of ICT in the lessons were examined using questionnaires. In the course of the research, the students were divided into 3 different groups and they used either Partnership for Learning Pilot Program, Study Portal of the university in the programme of ToolBook II, or WebQuests, which are the activities prepared by teachers through the Internet. In the pre-tests, listening and reading with comprehension was examined. In the post-tests it was listening and

reading with comprehension, speaking and writing. The results of the post-tests were statistically evaluated and they showed that there were statistically significant differences in the skill of listening with comprehension and in the skill of speaking and thus the hypothesis that ICT supports the development of speaking and listening with comprehension was proved. We might argue that the pre-tests in speaking and writing were not implemented and therefore it was not possible to make a conclusion that the experimental groups could be better in these skills already at the beginning of the period when the students were devided into groups. The results in the post-tests and their statistical evaluation indicate that there was a different level of the skills between the control group and the experimental group. The hypothesis of a positive influence of ICT on the development of the productive and receptive skills as well as on the teaching of the English language in general was proved. The author concentrated on the influence of ICT on the development of all skills (listening, reading, speaking, and writing). In Čechová´s theoretical part of the dissertation, the literature review in the field of the research or in the fields related to the topic of her research is missing. Similarly, the interpretation and discussion of the results in connection with other research results are not mentioned. The qualitative research, in which she conducted interviews with several students, is not fully integrated with other parts of the research as noted by one of her oponents.

Communication and Information technologies are also the topic of the dissertation thesis by Coufalová (2004) who examined the improvement of foreign language teaching methods at universities and the trends in the Internet application in foreign language teaching. She was also seeking to find out the interest in the teaching supported by ICT and the importance of ICT in students´motivation. The objective of her research was to discover the influence of the Internet on reading with comprehension and on writing. She compared the input and output knowledge of the control and experimental groups by means of Preliminary English Test (PET). The hypothesis that ICT supports the development of writing and reading with comprehension was verified with 94 respondents and was confirmed by the post-test results of the experimental group.

ICT is undoubtedly an important part of education. The use of ICT in foreign language teaching is discussed in a comprehensive study by Tůma (2012). It concerns computer

mediated communication and the developing of EFL learners´ communicative competence in writing in a blended learning course. The issues addressed relate to the conceptualisation of developing communicative competence and measuring the learners´ progress as well as using ICT in foreign language teaching. The research question asked whether the learners´ communicative competence changed after online discussion tasks and if so, in what manner. In the theoretical part, the background relevant literature is reviewed and main concepts are identified and defined. The second part is the empirical research, in which research methodology, methods and results are introduced and discussed, and the findings are evaluated. The empirical research was conducted as a case study with 18 students at the CEFR A2 level, participating in three discussion tasks conducted online, using asynchronous discussion forum. The methods of data collection included pre-tests and post-tests, learner corpus compiled from the texts written by the students and a questionnaire survey. The discussion task consisted of three parts: a pre-task with the aim for the students to learn the language used in the discusion, the discussion proper when the students solved a given task by means of text communication in the discussion forum, and a post-task with the aim for the students to correct mistakes in the discussion. Pre-tests and post-tests were of the same structure. The students´ task was, for example, to read a text and then fill in the blanks, or to complete the conversation with the correct letter ranged A – H. We could argue that this type of a test is difficult to be considered a writing test. It is just filling in the proper letters. Similarly, in another type of the test, the students read a text and then decided if it is *correct* by adding letter A, *wrong* by adding letter B and *doesn´t say* by adding letter C. It should not be considered for testing writing skills. Tůma (2012) stated that the results showed that learners´overall level of communicative competence in writing had improved, particularly the syntactic complexity of the learners´ language produced at the beginning and at the end of the course had increased, and the learners felt that their fluency in writing had improved. We would oppose that computer mediated skill of writing could not be properly checked in this way, except for the last type of the test, which concerned writing a message of about 25 – 35 words. As far as the literature review is concerned, the author presented the results of a brief review of the state of educational research in the Czech Republic and abroad focused on foreign language teaching in connection with e-learning, online learning and ICT. However, he conducted this search in a general way, mentioning several authors of research publications and

dissertations, but without any analysis or description. He also mentioned the number of research studies in the field. He completely excluded Czech confererence proceedings from the literature review even if some of them, such as Efficiency and Responsibility in Education, are in the Web of Science database. Despite our opposing comments, his work contributed to the knowledge in the field of theory of foreign language methodology by conceptualising the process of developing communicative competence, as well as to the foreign language teaching practice by designing a blended language course.

The topic of blended learning is also dealt with in the monograph by Reimanová (2011) that determines the role and function of e-learning at the tertiary level. She focuses on the positive role of blended learning usage in the lessons of English for specific purposes, particularly Business English, and on the development of communicative competence through blended learning. The objective of the study was also to find out what the opinion of students on e-learning inclusion in full-time studies is, and in what way e-learning influences communication.

The Moodle LMS is also the main topic of the research paper by authors from the Technical University of Liberec (Pavlíková and Pekařová, 2010) in which they introduced Moodle language courses, various types of e-learning materials for students − Moodle resources and activities - and their experience with the Moodle LMS as well. Even if the work was time-demanding, they remained positive about it and were ready to continue their work in producing more material to be used with their students. They point out positive evaluation by the students. Nevertheless, this study did not conduct any questionnaire research related to this field.

6.2 ESP e-learning research studies abroad

In the Handbook of Research on e-learning methodologies for language acquisition (Marriott, Karimi and Torres, 2009), the research on WebCT design and users perceptions in English for agriculture, conducted at the University of Navarre in Spain, has been described. The aim of this study was not exactly the same as ours, but the authors also worked with the learning management system, developed a course in the WebCT virtual learning management system, made some changes and innovations to investigate how the changes in the layout and organisation of the WebCT influenced learning, and added new features that affected students´ attainments, use and perceptions. They used this e-learning

course together with face-to-face teaching. This means that they started to use a virtual platform WebCT in combination with the face-to-face classes to create a blended course. The classroom sessions included autonomous work using the material in WebCT, oral exchanges, and speaking activities which were recorded. We consider this to be a good idea of video recordings of the students´ oral presentations and audio recordings from oral exchanges with Turkish students. The course was evaluated through questionnaires. The students complained that they worked harder than in traditional lessons, the process of searching, selecting and transmitting information was time consuming, and the pace of the class was too rapid for them. The teachers´ instruction was preferred to the computer-based ones. On the basis of the questionnaires, the authors suggested new innovations such as task based projects, the use of the Forum which created a community of learners. The innovations were highly motivating for the students. The use of WebCT as a complement to the face-to-face instruction proved useful as attainment levels and satisfaction with the subject improved. Based on our experience, we agree that the learning management system in traditional courses can contribute to autonomous lifelong learning by providing the support for online learning, teaching self-management tools, and developing autonomy in language learning.

Integrating virtual learning environment Moodle is the topic of another research study (Zoran and Rozman, 2010) that presents the views, attitudes, and perspectives of tertiary students using Moodle along with the traditional face-to-face instruction at professional higher education institutions. The questionnaire was distributed to the students of English for Specific Purposes, both full-time and part-time, in order to gain a better understanding regarding the issues of e-learning. These questionnaires consisted of open-ended and Likert scale questions and solicited information concerning the ability to work with computers, attitudes towards computers, experience with using information and communication technology for learning English, their use of English outside the classroom, assessment of material and their overall opinion, suggestions, and comments. The outcomes of the research project, which also aimed at comparing Blackboard and Moodle, showed that the two courseware packets were comparable in the number of criteria such as students´ satisfaction with communication tools and with web-resources as learning tools, but Moodle outperformed Blackboard on the criteria such as convenient navigation, ease of

incorporating multimedia components, and students´ satisfaction with tools for peer interaction. Moodle was further chosen due to its socio-constructivist nature based on the fact that learning is about constructing knowledge and interaction. The results of the study also showed that some students were facing language and technology problems and obstacles. They were wary of using social networking tools within Moodle, but found the platform useful for organisational purposes more than for collaborative activities. This study suggested that the current structure of ESP within Moodle had positive effects on students. The analysis showed that both part-time and full-time students found Moodle to be easy to use, appreciated a high degree of functionality and found using Moodle as a positive experience. In both research studies, we missed the hypotheses identification and their verification. However, the research instruments were appropriate and described in detail.

Similarly, the virtual e-learning environment for teaching English for Specific Purposes (Blackboard) is assessed in Mullamaa (2010). The research connected with a pure online course in the virtual learning environment at the University of Tartu in Estonia is described. The study investigates positive aspects of using ICT that were acknowledged to be stimulating for both the students and teachers. The authors shared their experience in using this LMS. They experienced that the virtual environment can be successfully used for supporting student-centred learning, for increasing students´ motivation and for engaging them in the learning process. It is also a flexible environment for developing individualisation and enabling cooperation with students. They analysed the feedback from students´ questionnaires on running a 100% online course with a special focus on examining the possibilities for supporting and encouraging the student-centred learning, and also on increasing the students´ responsibility in their learning process. Results of the research showed that the students´attitudes to the course were positive. The participation in the course pushed them to read more articles in English, raised new thoughts in them, developed their skills of extrapolating information, writing reviews and using power-points. It was also proved that the progress had been made on the student-centred conceptual learning. Their ability to analyse their achievements and course benefits in a broader conceptual framework was considered positive. Based on the outcomes of the research, the author claimed that 100% of the online language course was successful. One

might argue that to claim this, the research should be extended on the impact and effectiveness of the course on the results of the students. We also conducted the research connected with a pure online course in the Moodle LMS. We believe that such courses can offer possibilities for self-development, online discussions and progressing towards one´s goals in an academic e-environment and that a prompt teacher´s feedback is very important. Online communication with group-mates also helps one build a framework to one´s development.

Research in content-based instruction together with e-learning was conducted by Mamakou and Grigoriadou (2009) at the Faculty of Science and Technology of the University of Peloponnese in Greece with the students of Computer Science and Technology and Telecommunication Science and Technology. ESP is a compulsory subject in the first year of studies. Researchers exploited information technology in the project-based and content–based lessons in order to boost the students' effectiveness and receive best results. They comprehend and define Content-based Instruction (CBI) as follows: "CBI generally refers to language learning through the study of a content area, for example history, information technology, and economics. The subject-matter is the focus of classroom instruction, and therefore, the acquisition of language is seen as a natural consequence or by-product of subject-matter learning" (Mamakou and Grigoriadou, 2009: 476). In our classes, we consider the language acquisition not as a by-product, but more as a co-product with the subject matter cognition. They had in-class synchronous teaching and asynchronous teaching for which an open source learning management system (LMS) e-Class platform was exploited. Apart from the ICT tool, the students were provided with a coursebook. The authors argue that it would be too ambitious and far-fetched to encourage the students to rely totally on the electronic tool; they think that a transitional period should be allowed before the students successfully join a "coursebookless" online course. The experiment combined electronic technology with instruction so that the face-to-face instruction was applied to provide guidance, encouragement, feedback and advice. The authors came to a conclusion that the lessons had been effectively realised through the incorporation of the e-Class LMS in the longstanding traditional curriculum. This incorporation proved highly motivating and led to positive results concerning both the course learning objective and the feedback received about the e-Class. However, the studies were not conducted online

completely. The model managed to enrich learning activities for students, but it did not constitute a pure distance-teaching environment. The students moved from instructor-dependent and coursebook-dependent learning to students´ active, responsible learning in LMS e-Class. Nevertheless, their experiment did not eliminate the traditional face-to-face course delivery form, the scheme comprised the class instruction and the self-study through ICT as well.

Research study on the functions of teachers in e-learning and face-to-face learning environments was conducted at the Department of Education Sciences, University of Extremadura in Spain. (Díaz and Entonado, 2012) The main purpose of this study was not to compare the online and the traditional face-to-face instruction merely to prove which was better, but rather it aimed at highlighting some of the possible risks and strengths which might help improve the role of teachers in both methods. The authors used various thematic blocks from a general psycho-pedagogical training programme. Teachers taught two different groups of students, one of them using the face-to-face method and the other online. The study was designed to use a quantitative and qualitative methodological combination, and it focused on the dimensions of "theoretical content," "practical content," "tutor/student interaction" and "design" of the training activity. Their results confirmed that no significant differences in the roles of the teacher in the two teaching methods, face-to-face and online, had been found; any differences that might exist were usually the consequence of the teacher involvement and of the commitment of the institution in programming the learning process.

Studies like this may induce online and face-to-face teachers to reflect on their practices, and to become aware of improvements they might make in their roles as teachers. In both modes, the importance of psycho-pedagogical, technical and organisational aspects of training were shown. Positively-valued tasks carried out by teachers, such as the facilitating of a teaching/learning process, combining the explanation of theoretical contents with activities, and encouraging interactions, are also identical in both teaching systems. Díaz and Entonado (2012) found out that a field experiment carried out by Hui et al. (2008) had compared the effectiveness and satisfaction associated with technology-assisted learning with that of face-to-face learning. It showed that technology-assisted learning improved students' acquisition of knowledge which required abstract

conceptualisation and reflective observation, but adversely affected students' ability to obtain knowledge which required concrete experience. The results showed that technology-assisted learning was better for vocabulary learning than face-to-face learning, but it was less effective in developing listening comprehension skills.

According to Ismail and Harun (2006) from the Islamic College University of Malaysia (KUIM), e-learning is a convergence of the Internet and learning or it is also seen as the Internet-enabled learning. E-learning can be a powerful alternative means of learning with good design and delivery. The effectiveness of learning experience gained by the learners through the learner-centred design which e-learning offers was pointed out. The research study with the teachers from six different faculties in KUIM was conducted. It concerned their experience and perspectives of e-learning in their classrooms. They tried to identify whether the respondents (50) understood the meaning of e-learning, the extent of the sources of the Internet, the lectures used in the classroom and the research, and they also tried to identify effective ways of enhancing teaching skills, as well as the obstacles that may prevent teachers from using e-learning. Questionnaires were administered, interviews conducted, and after collecting the data, the analysis was done by calculating compliance issues and the percentage. The findings showed that even though the academic staff used the e-learning technology as the part of the lessons, they preferred the ideas of group activities and found face-to-face sessions as the most effective method that supported students´ understanding in their learning. The constraints can be seen in the fear of technology and the reduction of personal time, which prevented most from using e-learning.

The research done in the ESP e-learning field so far has also focused on piloting e-courses in order to examine the benefits, challenges and application for lifelong learning. ESP e-learning material is a topic of the research study (Gridasova, Ivanovaite and Pouyioutas, 2008) concerning the pilot implementation of English for Information Technology. This material has been designed for IT working professionals, students and English language teachers. The research study presents the background of material development and needs analysis carried out in order to decide the functionality of the material. The main aim of the

material is to facilitate the work of teachers, enhance self-study and encourage lifelong learning.

Research that investigated learners' attitudes to the application of e-portfolios in learning English for Specific Purposes (ESP) is the topic of another study (Kavaliauskiene and Anusiene, 2008). The authors also analysed learners' reflections to e-learning from the point of view of fostering sustainable lifelong learning. The participants of the research were students of various fields of studies who learnt English for Specific Purposes at university. The study examined the learners' perceptions of using electronic language portfolios for various tasks in English for Specific Purposes. The learners' experience of applying e-portfolios and their reflections on the benefits for improving language skills were analysed and statistically treated using SPSS software. The results show that students were satisfied with the application of e-portfolios in the lessons of ESP. Using e-portfolios helps teachers strengthen autonomous learning, and it encourages students' critical thinking, develops their creativity, motivates them and encourages their collaboration (Kavaliauskiene and Anusiene, 2008).

The application of new technology strategies is the main issue of another research (Pop, David and Florea, 2009) that is based on needs analysis questionnaire of ESP teachers in Romanian higher education and on computer-based course assessment questionnaire. The case study shows increased levels of students´ motivation, autonomy and interaction connected with computer-based instruction in opposition to the traditional face-to-face instruction. The empirical results indicate that students are not prepared to be fully autonomous and that the interactive online instruction may not represent the case. So the local solution for increased students´ autonomy will be realised through blended learning. The research was based on questionnaires expressing the opinions of students and teachers. Therefore, the results of the research were a little limited in the scope and could not reflect properly if the online instruction would be convenient and contributional for the students. The challenge for the researchers is obvious - conducting research in the online instruction. Support to distance learners is presented in the study on piloting a vocational e-course at a UK college. The course supports non-native English speaking learners to complete the essay-type questions of the e-course assignments. It suggests further improvements to the course and recommendations for further research (Bibila, 2010).

In research studies from 1990 to 2000 inclusive, the research on the use of computers in second and foreign language learning was conducted at the University of Texas. The authors (Liu et al, 2010: 24) explored the research evidence with regard to how computer technology can enhance language skills acquisition. They went through 70 research studies using quantitative and/or qualitative methodologies on Computer Use in Second Language Learning, but there were only a few studies on e-learning in English teaching. Research provided evidence on the effectiveness of computer technology in second language learning. Only a few studies focused on listening and speaking, but instead, most of the studies addressed reading and writing skills. Although there has not been convincing evidence on the use of computer technology to improve language skills in all areas the majority of the studies reviewed indicated enthusiastic responses and positive attitudes toward technology use from the students (Liu et al, 2010).

The development of an e-learning course for therapeutic professionals is described in the research paper called "Developing ESP e-learning course: How an e-learning course was created for medical university students" by Donesch-Jezo and Misztal (2012). The content, stages of development and types of interactive exercises are discussed. The computer-based tasks that are encompassed in the course engage learners in the interactive language acquisition. The teacher's role is to supervise the learning process and assess the learners' progress.

Similarly, Pouyioutas et al (2007) present the initial stages of a Leonardo Da Vinci project that is aimed at developing the English Language for Information Technology Specialists. E-Learning module is designed for IT professionals, students and English language tutors in order to bridge the current gap in the English for Specific Purposes (ESP) and IT-related materials, to facilitate the work of teachers, encourage life-long learning and self-study. The research is based on the analysis of the results of a survey focused on the identification of the requirements, special needs of users of the proposed module. The survey was conducted through a questionnaire given to IT students and through interviews with IT specialists. Based on the analysis of the results, suggestions for the module design are offered.

Byrne (2007) deals with the use of Learning Management Systems (LMS), called Claroline at the Catholic University of Louvain in Belgium. The author compares two uses of the

Claroline LMS available at Louvain-la-Neuve within the framework of an ESP writing course. The first experiment was conducted from October 2003 to May 2005, and the second one was conducted as of October 2005. Students in Political Science had to make a similar number of written contributions in iCampus, which is the version of the Claroline platform available at UCL. Teacher's feedback (only correction) was limited in the first experiment. During the second experiment, there was a possibility of a teacher´s annotation (not only correction) of the learners´ data. The idea was borrowed from Wible et al. (in Byrne, 2007), who describe an error annotation system fully integrated into the LMS. The author combined the existing platform with an off-the-shelf annotating tool. In the contribution, the author highlights the advantages and shortcomings of the combined approach, both in terms of proficiency gains and student satisfaction.

6.3 Conclusion of the literature review

The literature review has revealed the absence of scientific research in the field of our investigation. There have been very few research studies on ESP e-learning so far, nor have there been any studies on the experimental research that examines the effectiveness of ESP e-learning in comparison with the face-to-face instruction. No studies have been found examining whether there are any statistically significant differences in the results of the experimental group and the control group in ESP e-learning, the issue that we have considered significant in connection with long-term aims of our university, the Ministry of Education, Youth and Sports of the Czech Republic, and also the European Union educational authorities. Our work attempts to address such a shortfall. The description and analysis of research studies have demonstrated that there is a need for the study that will provide significant and new information in the field of the research. It justified why our proposed research study should be conducted and led us to the rationale for our research.

EMPIRICAL PART

7 Background for the empirical research

7.1 Language education at the Faculty of Economics and Management of the Czech University of Life Sciences Prague

At present, the studies of languages at the Faculty of Economics and Management of the Czech University of Life Sciences Prague (FEM of CULS) are developed in accordance with the Long-term aim of educational, scientific, research, development, innovative and other creative activities of the Faculty of Economics and Management of the Czech University of Life Sciences Prague for the period of 2011 – 2015, and in the updating of the long-term aim for higher education institutions for the year 2012, set by the Ministry of Education, Youth and Sports of the Czech Republic. In accordance with the Act on Higher Education Institutions no. 111/1998 Coll., the faculty is obliged to submit the Long term aim of educational, scientific, research, development, innovative and another creative activities as one of its basic strategic documents. After the approval by the Academic Senate and the acceptance of the Academic Community, it becomes an obligatory programme of work at all workplaces of the faculty. The priority aims (3.5) include the enhancing of the implementation of technical and programme support of e-learning and its usage by individual departments, effective usage of the university´s Moodle LMS, the development of indirect teaching forms and methods, electronic teaching aids production, enhancing the quality and effectiveness of studies and self-studies, extending the offer of courses for life long learning which is connected with the usage of a network of consultancy centers of the Faculty of Economics situated out of Prague.

The Department of languages, in accordance with this aim and with the European language policy, concentrates on the language preparation of specialists who are able to study foreign language materials of their fields of studies, obtain information in foreign languages and use it for communication in their professional activities. The students should be able to communicate with foreign partners on subject-matter of their fields of studies, to take part in study stays and postgraduate studies abroad, to work with specialist and scientific foreign language texts, and to take part in international seminars, conferences,

symposia and other meetings with lectures, papers, discussions etc. After completing their studies, they are able to get a chance to work in international institutions in our country and within the European Union. There is a wide range of courses offered in English, German, Spanish, Russian, Italian, French, Chinese and Czech for foreigners. They are divided into levels according to the European Framework of Reference for Languages (A1, A2, B1, B2, and C1). In the profile of graduates, focus is placed on achieving communicative competence in two languages. The English language is compulsory and a second language can be chosen from the wide range of languages offered.

ESP courses are designed for the B1 level of languages and are made available in the case of there being a sufficient number of participants. At the time of writing, the following ESP language courses are offered: Business English, English for Agriculture, English for Forestry and Ecology, English for Presentations and Negotiations. The Department of Languages also provides a programme of extended language studies which is a combination of ESP and CLIL for the study of chosen specialist disciplines in English and German for the purposes of international communication. It begins in the 2nd year for all bachelor study programmes of the FEM with six hours of intensive specialist foreign language classes per week. This type of study takes four terms and enhances specialist language communication. The programme strengthens the interdisciplinary approach to the teaching of foreign languages as it is based on cooperation between teachers of the department of languages and teachers from specialist departments who studied or lectured on the given subject abroad. The lessons are also taught by visiting professors from partner universities.

In accordance with the above mentioned Long-term aim, the Department of Languages guarantees and provides language courses not only for full-time students, but also for distance students and for the courses of lifelong education. For distance students, there is the time allocation of 6 teaching hours per term in the examination period of a given term. There are no lessons intended for distance students, they study on their own and within the block of 6 hours, they undertake credit tests. The development of e-learning courses is therefore of high significance and one of the priorities of the department. The Department of Languages also supports and provides lifelong learning studies of languages. The courses are run in the centres of distance studies outside Prague in Klatovy, Jičín, Most, Hradec Králové, Litoměřice, Tábor and in Šumperk. In these centres, foreign language

classes are compulsory for all the students within their bachelor studies. The classes are run on weekends, once per term, totalling 16 teaching hours. This number of teaching hours is not sufficient, moreover, it is demanding, costly and inconvenient to get an instructor and students to the same place at the same time. E-learning enables the students to adjust learning to their individual needs and time requirements. That is also why the existence of e-learning courses in Moodle is seen here as a high priority for the whole faculty.

This doctoral dissertation meets the requirements set in the Long-term aim of educational, scientific, research, development, innovative and other creative activities of the Faculty of Economics and Management of the Czech University of Life Sciences Prague for the period of 2011 – 2015.

The doctoral dissertation came into being as the part of the grant of the Higher Education Institutions Development Fund of the Czech Republic 2011, no. F5-1836 called "Online support of the subject of Business English within the Moodle learning management system"that enables the teacher to insert his/her own teaching material into this virtual environment. The system encompasses the design of the course, delivery of content of the course, checking the access rights for users, tests and evaluation of the learners´ participation.

7.2 The emergence of the ESP e-learning course of Business English

7.2.1 The process of the course development within the grant of Higher Institution Development Fund of the Czech Republic 2011, no. F5-1836.

A current trend in university teaching is to cut the number of contact lessons, putting a higher emphasis on the e-learning method of studies. The e-learning course is a new alternative of education which serves the enrichment of the eduational process (Nevima, 2012). The ESP e-learning course of Business English is designed in accordance with the long-term aim and key priorities of the CULS development that includes the development of indirect teaching forms and methods, development of electronic teaching aids, and enhancing the quality and effectiveness of studies and self-studies within the Moodle LMS. The course at our university was designed in the form of a 14 - module course in the Moodle LMS on the B1 level of the Common European Framework of Reference for

Languages and within the grant of Higher Education Institutions Development Fund of the Czech Republic 2011, no. F5-1836. The course was critically evaluated by two peers from the point of view of the content and also the technical processing. The project was successfully defended by the author of the dissertation in front of the panel of judges in February 2012. It is intended for at least intermediate students who have mastered general principles of grammar and basic vocabulary in their previous studies. Online study material supports an interactive form of teaching by means of multimedia application. It concerns the usage of information and communication technologies for more effective access to education for a larger number of learners at the qualitatively higher level. One of the basic prerequisites of this type of studies is the quality of study materials. They will substitute, if need be, for the immediate contact of teachers with full-time students, as well as with distance students.

At present, Business English is a voluntary subject and it is taught in the form of contact teaching (once per week for 90 minutes) with the use of a textbook and additional audio materials. Online teaching is offered with the aim of providing an alternative for those students (the disabled, distance students with employment limitations etc.) who have difficulties in attending classes in the traditional manner, and will promote teaching methods that allow teachers to make use of new advances in communication technology. The learning process is supported by multimedia didactic material which must be studied by students via the Internet, using the Moodle platform. This material has the same contents as that used in the face-to-face classes. The duration is the same as for class attendance, based on the estimate that a student will need to invest a maximum of 100 hours of work and participation in the various activities required for a pass in this phase. Materials include specialist topics that are encompassed in the textbook of English for Business and Correspondence (Kučírková, 2006) that is used in the face-to-face classes, written several years ago by the author of this dissertation and of this project in cooperation with subject-matter teachers through gathering information about students´subject-matter courses and about priorities the specialist departments see. The teaching material was evaluated in cooperation with colleagues from the partner University of Plymouth and Slovak Agricultural University in Nitra. The material was transferred into the online study support by means of the "Hot Potatoes" tool and by the tools of the Moodle LMS. We processed and arranged specialist texts with exercises, listening, videos,

audios and independent tasks so that they would correspond with the requirements stipulated for self-studies.

The online course represents academic Business English with topics such as microeconomics, macroeconomics, economic environment, accounting etc., together with the acquisition of knowledge of these topics, and also the topics connected with business context such as marketing and advertising, company profile, personnel management etc. where the fundamental concern is on business transactions. We also included business correspondence as nowadays, with personal computers and email, and less secretarial support, more businessmen compose their own correspondence. Modern technology is changing the format of written correspondence – what constitutes an acceptable email is still evolving, format and language can be more informal, especially as emails are likely to be transmitted directly and not through the hands of a secretary (Dudley-Evans, St John 1998: 64). The course of Business English prepares the students for subsequent classes taught in English such as Economics and Management Programme or European Agrarian Diplomacy in Master Degree studies, and for their jobs as well. We try to practise and integrate skills and vocabulary associated with subject-matter courses – listening to lectures, participating in seminars, reading articles, writing reports, letters etc.

7.2.2 Technical solution within Moodle LMS

Moodle is the abbreviation for Modular Object-oriented Dynamic Learning Enviroment. The system was developed by Martin Dougiamas during his studies at Curtin University of Technology in Australian Perth and the first version was introduced in 2002. In a short time it spread into various types of educational institutions and was also used in commercial education. An important role in its expansion was enhanced by the fact that this system is free and open. It is continually being developed and functions are regularly added due to an increasing community of users. It is accessible from any computer in the world which is connected to the Internet and will work with any common Internet browser (Albrecht, 2006). Discussions on the Moodle LMS and e-learning are focused more on methodological aspects of e-learning than on the technical side. It means that the roles which individual participants of the course will fulfill are more important than by which means the education will be carried out (Albrecht, 2006). The Moodle LMS is also based on the social dimension of constructivism (see 4.2.2) that stresses the role of social

interaction and culture in the process of knowledge construction. This means that the Moodle LMS also includes elements enabling cooperative learning. Therefore, an important element of the study by means of the Moodle LMS is creating a community of participants of a given course and supporting mutual interaction. (Albrecht, 2006). As we have mentioned, the Moodle LMS is an Open Source Course Management System (CMS) that is also known as a Learning Management System (LMS), Learning Content Management System (LCMS) or a Virtual Learning Environment (VLE), which is provided free, developed by a worldwide community and used for study purposes. It has become very popular among educators around the world as a tool for creating online dynamic web sites for their students. To work, it needs to be installed on a web server somewhere, either on one´s own computers or one at a web hosting company. It is the software package for the support of full-time and distance studies by means of online courses available on the worldwide web. It enables easy publication of study materials, discussion forums, collection and evaluation of electronically submitted assignments, preparation of online tests, and a number of other activities supporting the teaching. (Moodle, 2011)

As Dudeney and Hockly (2007) state, teachers can combine various resources – pages and links to websites – with interactive activities such as quizzes, questionnaires, forums and chat rooms to create the course. Some electronic activities are created in the most famous authoring tool called Hot Potatoes. An authoring tool is an installable program allowing teachers to create their own materials in electronic format which can then be distributed to students via web pages. Hot Potatoes is a Windows or Mac programme that produces a variety of activities (multiple choice, short answer, jumbled sentence, crossword, matching, gap-fill) and teachers can freely download it for educational purposes. It also allows inclusion of audio files in MP3 format and exercises can be stored on a central server. This means that they can be accessed from anywhere through the Internet (Dudeney and Hockly, 2007). The online course is available in the Moodle LMS on the university web pages.

Albrecht (2006: 32) defines the e-course as a multimedia computer programme in which text is combined with animation, graphics, video, audio, simulations and tests. It mostly concerns HTML and XML pages in which various plug-ins are used in order to achieve interactivity and a multimedia computer system.

The course at our university was developed in the form of a 14-module course in the Moodle Learning Management System (LMS) on the B1 level of the Common European Framework of Reference for Languages.

As far as the course in the Moodle LMS is concerned, the development of speaking productive skills is ommited. From a technical point of view, we are not able to manage speaking through the Moodle LMS at present, perhaps some commercial programmes could support the development of speaking skills. Moreover, it would not be possible to speak with students individually through the Skype or ICQ due to a large number of distance students. Therefore, we excluded this language skill from our course and research. Speaking is not currently supported within the Moodle LMS, it is left to the face-to-face instruction.

Writing is undertaken via email when students translate specialist text from Czech into English or write (rewrite) business letters, send them to the teacher who corrects them and send them back so that the students receive feedback. In the Moodle LMS, the development of receptive language skills such as listening with comprehension and reading with comprehension is included. There are listening activities with the follow-up activities for widening and strengthening terminology. All introductory specialist articles are focused on listening and reading with comprehension. Here, the content and language integrated learning is used as there is the demand for the students to have the basic knowledge of topics that relate to the main field of studies at the FEM and in specialist departments. All specialist articles and key terms were recorded by our native American speaker employed by the Department of Languages and with the help of a technician placed into the Moodle LMS. Activities in Hot Potatoes and in Word were developed by the author of this dissertation and co-authors (language teachers).

7.2.3 E-learning course design

Course design is a process that "entails the use of the theoretical and empirical information available to produce a syllabus, to select, adapt or write materials in accordance with the syllabus, to develop a methodology for teaching those materials and to establish evaluation procedures by which progress toward the specified goals will be measured" (Hutchinson and Waters, 1987: 65). E-learning course is designed according to the following advice stipulated in Nevima (2012): it must be user-friendly, it should be designed attractively and

easy orientation in the course is crucial. The initial part should contain basic information on the course, there should be a tutor´s contact (name, email, consultation hours). It should be divided into several topics according to the tutor´s consideration and needs of students, each unit (module) should contain information on the content of the unit. Online communication in the form of forums, messages is important for students´ feedback. Hutchison and Waters (1987: 74) claim that "Course design is a dynamic process. Needs and resources vary with time." The Moodle LMS is an open source, the e-learning course design can be modified and updated. It also needs to have built –in feedback channels to enable the course to respond to developments. We tried to handle an integrated skills approach to the course design, therefore, we tested nearly all skills. The course helps learners develop skills and strategy which will continue to be developed after the ESP e-learning course itself.

Syllabus:

"Syllabus is a document which says what will (should) be learnt"(Hutchinson and Waters, 1987: 80). Any teaching material in reality operates several syllabuses. Our course has a topical syllabus that reflects the students´ main fields of studies and their departments. At the same time, the syllabus is also functional as far as writing and business context is concerned (personnel management, marketing etc.). The course is focused on the development of business and economic terminology, reading comprehension, listening comprehension, writing and the work with up-to-date authentic audio-visual materials. Online study support for Business English is in the form of a 14-module course in the Moodle LMS with the following topics:

Winter term:
Business and its basic terms
Business letter layout
Content and style of business letters
Business organizations
Company profile
Macroeconomics, microeconomics
Enquiries, replies

Summer term:

Personnel management

Curriculum vitae, letter of application, job contract

Marketing

Orders

Accounting and finance

Payment

Email

Module structure

Single thematic units are of the following structure with respect to the principles of e-learning with unified structure of thematic units (Albrecht, 2006):

a) Lead-in

b) Key words and definitions

c) Specialist material – reading/audio-visual

d) Various activities

e) Resources

(see Appendix 1)

The content of the course

The content of the course is connected with aims of the course with regard to the characteristics of students, their level of knowledge, skills, competences and their experience (Albrecht, 2006: 46). The content (see Appendix 2) is the following:

a) materials concerning the topic – a specialist text intended for reading comprehension practice

b) autocorrective exercises such as filling in the gaps, multiple choice, true/false, matching, intended for students' vocabulary practice in hot potatoes

c) in some modules online submission of written assignments (translations, letters)

d) other additional activities – listening, videos

e) tests for training purposes with limited or unlimited number of possibilities, or a credit test with just one try and a time limit - a multiple choice test which can be used either for revision of the topic or as an assessment device

The course focuses on the issues of business and economics as well as on the English language used in business. It should provide students with a useful guide or tool on how to communicate about business in English. We also used activities from web sites designed specifically for language learners: BBC pages on Business English available at www.bbc.co.uk/worldservice/learningenglish, as they have explicit tutorial function and help with language learning.

Web sites that have no explicit language role – they serve as a resource for authentic language material, for instance videos on company promotion. In both cases web sites contain authentic language that has not been simplified for learners.

In the course, we tried to develop listening, reading and writing skills (not speaking), then translation as the fifth skill and vocabulary, because these skills are important for the studies and professions (listening to lectures, note taking, writing business letters, reports, reading specialist texts etc.). The development of the knowledge of grammar was not in the first plan of the course, as the students were already supposed to have a sufficient command of English grammar appropriate for B1 level within the Common European Framework of Reference for Languages. Even if grammar were not developed systematically, some grammatical practice within the activities was necessary. Students received some kind of grammatical instruction at secondary schools but they have either forgotten or have never adequately learned certain parts of grammar. But in general, they were supposed to have an adequate knowledge of grammar to take part in the course.

The development of vocabulary that can be applied in business and economics was of primary importance. By learning and practising specialist vocabulary the students more or less receive a guidance, or a key to performing other activities like speaking, reading, writing and listening.

Even if the teacher were present during the lessons, the students worked on computers independently. Computers functioned as stimuli and tools for language learning.

In the Moodle LMS, students log in and have access to the course syllabus, as well as activities to be completed. The Moodle LMS enables teachers to develop effective online learning courses, include dictionaries, quizzes, and assignments to be done outside the classroom. It is possible to record students´attempts, monitor their self-study, and fix the terms for completing the activities.

8 Research methodology

8.1 Objectives of the research

The objective of the research is to find out the influence of e-learning on the students´ results after completing a full-time e-learning course in comparison with the face-to-face instruction. The research is aimed at examining whether the e-learning method of Business English is as effective as the face-to-face instruction, i.e., whether there are no statistically significant differences between the results of students completing the e-learning course and the face-to-face course. At the same time, the statistically significant differences between the pre-tests and the post-tests within individual groups are examined, i.e., whether the students improved their skills and vocabulary.

The supplementary objective is to find the opinions of students on this issue depending on the frequencies of their responses and on the qualitative signs. The intended practical outcome is the ESP e-learning course (see 7.2) focused on business and economic terminology in the Moodle LMS.

8.2 Research method: experiment

"Experimental research is concerned with studies of the effects of specified and controlled treatments given to students in groups. Experimental research designs have a lot of variations, depending on the specific conditions under which the research is conducted" (Seliger and Shohamy, 1990: 137). Our model of an experimental research design is deductive with a high level of explicitness of data collection represented by tests of high explicitness such as multiple choice and true/false tests. "In deductive research we make assumptions and try to predict cause-and-effect relationships or the co-occurrence of phenomena. We attempt to support our predictions by designing an investigation, collecting data, and statistically examining the results." (Seliger and Shohamy, 1990: 89). This research is concerned with testing hypotheses, with problems of the control of variables, internal and external validity because of the need to demonstrate a relationship unambiguously (Seliger and Shohamy, 1990).

It is an experimental research conducted under standard school conditions. Campbell and Stanley (in Seliger and Shohamy, 1990: 148) also term it "quazi-experimental" design "constructed from situations which already exist in the real world, and are probably more representative of conditions found in educational contexts".

8.3 Major components of experimental research design

8.3.1 Research questions, hypotheses and sub-hypotheses

On the basis of the detailed study of the literature that concerns the research in second language teaching and learning and pedagogical research (Seliger and Shohamy, 1990; Pelikán, 2007; Gavora, 2000; Travers, 1969; Cohen, 2007), the following research questions and hypotheses with sub-hypotheses were formulated:

Formulation of the research questions:

Is the e-learning method as effective as the method of face-to-face instruction?

Is there any statistically significant improvement in the skills and vocabulary of the students after completing the e-learning course and the traditional face-to-face instruction?

What is the students' opinion on e-learning and on the development of their skills and vocabulay through it?

Hypotheses:

1 There are no statistically significant differences between the results of university students learning specific English for business and economics through e-learning (purely online course) with focus on specialist vocabulary, reading comprehension, listening comprehension, writing and translation and those studying ESP through the traditional face-to-face method.

Sub-hypotheses:

1.1 There are no statistically significant differences in listening comprehension between the results of university students learning through e-learning and those studying through the face-to-face method.

1.2 There are no statistically significant differences in specialist vocabulary between the results of university students learning through e-learning and those studying through the face-to-face method.

1.3 There are no statistically significant differences in reading comprehension between the results of university students learning through e-learning and those studying through the face-to-face method.

1.4 There are no statistically significant differences in translation between the results of university students learning through e-learning and those studying through the face-to-face method.

1.5 There are no statistically significant differences in writing between the results of university students learning through e-learning and those studying through the face-to-face method.

2 There are statistically significant differences in listening comprehension, specialist vocabulary, in reading comprehension, in translation and in writing in the results of university students learning through e-learning (purely online course) between their pre-test and post-test.

Sub-hypotheses:

2.1 There are statistically significant differences in listening comprehension in the results of university students learning through e-learning between their pre-test and post-test.

2.2 There are statistically significant differences in specialist vocabulary in the results of university students learning through e-learning between their pre-test and post-test.

2.3 There are statistically significant differences in reading comprehension in the results of university students learning through e-learning between their pre-test and post-test.

2.4 There are statistically significant differences in translation in the results of university students learning through e-learning between their pre-test and post-test.

2.5 There are statistically significant differences in writing in the results of university students learning through e-learning between their pre-test and post-test.

3 There are statistically significant differences in listening comprehension, in specialist vocabulary, in reading comprehension, in translation and in writing in the results of university students learning through the face-to-face method between their pre-test and post-test.

Sub-hypotheses:

3.1 There are statistically significant differences in listening comprehension in the results of university students learning through the face-to-face method between their pre-test and post-test.

3.2 There are statistically significant differences in specialist vocabulary in the results of university students learning through the face-to-face method between their pre-test and post-test.

3.3 There are statistically significant differences in reading comprehension in the results of university students learning through the face-to-face method between their pre-test and post-test.

3.4 There are statistically significant differences in translation in the results of university students learning through the face-to-face method between their pre-test and post-test.

3.5 There are statistically significant differences in writing in the results of university students learning through the face-to-face method between their pre-test and post-test.

8.3.2 Population and the research sample

The population is represented by students of the Czech University of Life Sciences Prague within the bachelor studies who enrolled into B1 courses according to the CEFR. 3,082 students of all forms of studies, i.e., full-time students, distance students and students of lifelong education, were enrolled into English B1 in the winter term of the academic year 2012/2013. The research sample of 107 students is represented by those full-time students of B1 level who enrolled into the subject of Business English. The range of a sample for the research examination is difficult to stipulate. The notions of a small or a big sample are

relative. Statisticians consider a big sample with more than 30 items. The bigger the sample the more it draws near to the population (Pelikán, 2007: 52). In experimental research, groups for the experiment can be natural in the sense that they already existed prior to the research or they can be formed specifically for the purposes of the research (Seliger and Shohamy, 1990: 136). Both in the pilot study and in the study proper, we worked with natural groups that existed prior to the research and which were randomly chosen to be experimental or control groups by drawing lots. Students enrolled into the lessons individually on the basis of their specialist schedules and it was not possible to influence how many of them would be enrolled into the subject of Business English and into which days when the Business English lessons were offered. In the pre-research there was one experimental and one control group. In the study proper there were two experimental groups and two control groups. They were considered as one experimental group and one control group for the purposes of the research because in order to gather enough subjects for experimental research, it is possible to pool the results of more classes (Seliger and Shohamy, 1990:149; Pelikán 2007: 54). It means that we were replicating the same experiment each time with a different group and we treated two experimental groups as one group and two control groups as one group. The decision on which groups will be experimental and which will be control was made on the basis of a random choice in accordance with Pelikan´s monograph on empirical research (Pelikán, 2007: 228). We put four pieces of paper with days and time of the lessons in the hat and we chose two pieces of paper by drawing lots. However, after drawing the lots, the first piece of paper had to be put back into the hat in order not to increase the probability of choice while decreasing the number of items. (Pelikán, 2007: 49) So the students when enrolling into the lessons did not know what day and what time the e-learning method will be used. We assume that they were not more motivated and influenced by the so called Hawthorne effect (Seliger and Shohamy, 1990: 108; Pelikán, 2007: 229; Gavora, 1996: 95).

8.3.3 Treatment

The treatment is a controlled and intentional exposure of groups to a language teaching method, specially constructed for the experiment (Selinger, Shohamy, 1990: 136 - 137). In our research, it is the **e-learning method** in the Moodle learning management system, developed within the grant of Higher Education Institutions Development Fund of the

Czech Republic 2011, no. F5-1836 (see above 7.2). The treatment is an **independent variable** in the research.

8.3.4 Measurement of the treatment: research instruments

Measurement is a **dependent variable** in the research. It refers to how the effects of the treatment will be evaluated or observed (Seliger and Shohamy, 1990: 137).   It is represented by language pre-tests and post-tests as the main research instruments. Questionnaires were used as a supplementary research instrument to find out student´s opinion on e-learning.

8.3.4.1 Pre-tests, post-tests

Developing tests

The testing cycle has several stages that are illustrated in Figure 1 (Manual for Language Test Development and Examining, 2011: 18). The basic testing cycle was accommodated for our purposes as some phases are necessary for some contexts only. The development of the tests started with the decision to provide the test which was made by a teacher of Business English for research purposes.

Figure 1: The testing cycle
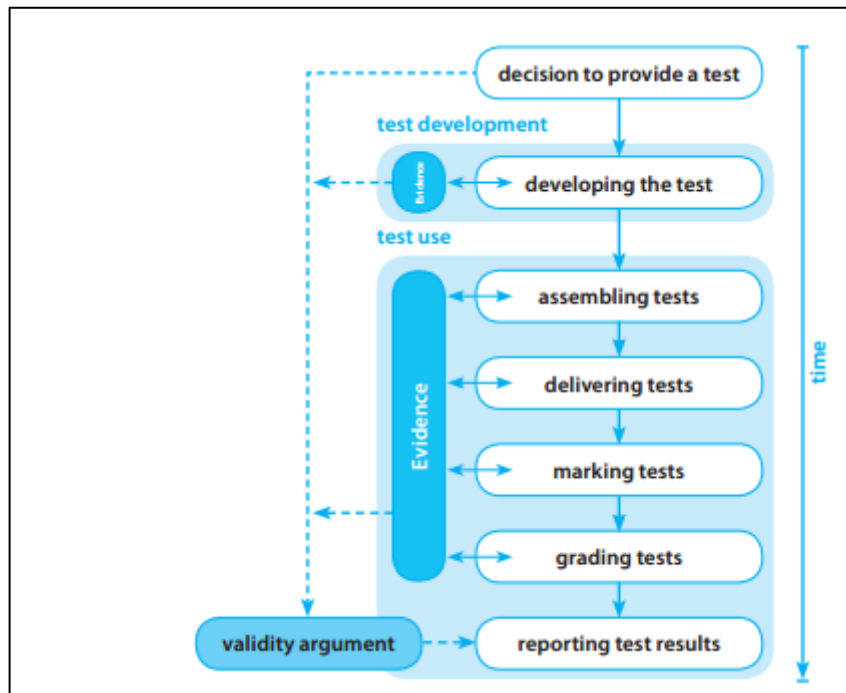
The tests are important for a comparable measure of 2 groups of students and also for feedback on learning for future lessons and for suggestions for further research. The tests, particularly pre-tests, were based on the following opinion of Dudley-Evans and St John (2005: 221) in the chapter on in-house test development: "… we also say for tests: make use of what is available, adapt and modify it." Samples of public examination tests: Practice Test 1 from Oxford preparation course for the TOEIC test (2006), Practice tests 2 from Success at First Certificate (1993) have been used, adapted and adopted for our practical needs - for testing the input general skills and vocabulary of the students. They have also been used as inspiration for the design of some parts of the tests (for example reading tests, translation tests). Public examination tests are standardised, "they demonstrate current thinking and provide valuable examples for in-house test development" and accuracy of marking as well; validity and reliability are also promoted and ensured. (Dudley-Evans and St John, 2005: 214). As standardised tests do not reflect what has been taught or learnt, therefore, our own post-tests were developed in which students´ knowledge of specialist business English was examined; just for listening, the standardised test with specialist terminology was used. When developing tests within our own context of use, we were inspired by the structure of standardised tests and we also built on the Manual for Language Test Development and Examining (Council of Europe, 2011), on the Manual for Relating Language Examinations to the CEFR for Languages: Learning, Teaching, Assessment (Council of Europe, 2009) and on the monograph by Seliger and Shohamy (1990). The tests are computer-based, all of them refer to a phenomenon that has become increasingly used in English language teaching recently (Dudeney and Hockly, 2005: 117). Students were given computer-based tests before they started a course and after completing the course. Their language levels in the skills of reading, listening, writing, translating, as well as in vocabulary and grammar were assessed. The tests were conducted under the supervision of the teacher and required the students to answer questions in a given time limit of 90 minutes, as stipulated for regular lessons of Business English, without reference to books or other people. We were limited by the time limit, and that is why the number of items was limited too. We wanted the students to have a sufficient opportunity to show their true ability and not to be under time pressure.

From the tests, we could deduct which skills and language means require most attention in the lessons, or how much focus should be given to, for example, vocabulary development. The tests measured the mastery of the syllabus and the performance of students on a number of target language tasks.

To test reading skills, the following recommendation was used: "EAP examinations usually use medium-length passages for reading" (Dudley-Evans and St John, 2005: 226). The carrier content and lexical load had to be chosen. It was not possible to answer without first having read the text. The form of multiple choice was selected in the final research; thus, marking was more objective than in the pre-research where reading was tested in the form of open-ended comprehension check. In this way we have increased the reliability of the test. One way by which the reliability of the test can be increased is through changing items that cause the problem, or another way is through lengthening the data collection instrument by adding more items (Seliger and Shohamy, 1990: 187). We added 5 items to the vocabulary subtest and 5 to the listening subtest. In the pre-test, there were 45 items and productive writing, and in the post-test, there were 55 items and productive writing. It was important because of the content validity of the test as we wanted to cover the content of specialist terminology in more detail. As Seliger and Shohamy (1990: 188) stress, the test content must be a good representation of the material which the students were supposed to learn during the year. The statistical measurement is more precise in this case.

Assembling tests

The aim of the assembling tests phase is to construct tests and to produce test materials. The test construction stage involved balancing a number of different aspects, such as test content (subject- matter) and item difficulty so that the test met the required specification - number and type of items to be included (Manual for Language Test Development and Examining, 2011:26). The number of items was sufficient to cover the necessary content and to provide reliable information about students´ abilities, and of course, there were some practical limits on the test length given by the time of 90 minutes as mentioned above. The item types included multiple choice for listening, reading, translation and vocabulary testing and true/false also for listening comprehension in pre-tests. Multiple choice is the technique that requires students to select a correct answer from a number of alternatives, usually based on the text or another stimulus that precedes it. True/false is the

procedure that requires students to determine whether a statement is correct or incorrect. It is often based on the text or an oral stimulus (Selinger and Shohamy, 1990: 177).

The tests were proofread by two experienced colleagues of Business English and verified and checked for the quality by trying them out in the pre-research, on the basis of which they were modified where necessary. This was important for the validity. Test reading and listening materials were checked for their length, suitability of topic and level of language. This helped to identify such faults as typing errors, unclear instructions, incorrect keys or where more than one correct answer was possible. Feedback from colleagues included suggestions on how the item might be changed. It was important that items had been reviewed by someone other than the author. The items were also answered by ourselves without looking at the answer key, as if taking the test, and this helped us to identify items with more than one possible correct answer, or items which were difficult or unclear.

Administering tests

The venue for the tests was the computer classroom where regular classes took place, so that the features such as accessibility, size of the room (ability to accommodate the number of students required, internal acoustics for listening etc.) were fit for the purpose of testing. As far as registering for the tests was concerned, the list of students in the class and personal knowledge of them was sufficient. Registration was carried out by students´ logins into the computer. Students were told the venue and the time of the tests in preceding lessons. Before the beginning of the tests, instructions were given to students about how to behave during the lessons. This included information about unauthorised materials and about dictionaries that were not allowed to be used. The use of mobile phones and leaving the classroom during tests was not allowed either. Warnings against unauthorised behaviour such as talking and copying were also given, as well as the start and end times. The tests started with listening comprehension, the audio was played twice which took about 20 minutes in total. Then students could concentrate on other tasks in the order they had wanted. They responded through a computer and they had only one attempt to choose the answer, except for listening with two attempts. Writing the letter was in Word and sent to the teacher via e-mail.

Marking

Machine marking was most useful as the multiple choice and true/false items were of types that did not require any human judgement, and a large number of tests had to be marked. The results of the tests in reading comprehension, listening comprehension, vocabulary and translation were machine marked in percentage in Moodle LMS. With computer-based testing, the reliability in marking is high. Productive writing cannot be machine marked. For reporting test results in writing we used band descriptors (Figure 3) specific to this particular skill. They are analytical descriptors for marking writing by Weir (in Dudley-Evans and St John, 2005: 219) and they are recommended for their reliability and breaking each feature down (relevance and adequacy of content, compositional organisation, cohesion, adequacy of vocabulary, grammar, mechanical accuracy – punctuation, spelling). The use of descriptors is vital for standardising because fair results can be provided only through standardisation of marking through the use of band decriptors to mark results. It was helpful to use tried and tested descriptors as they were developed and proved by those who invested time and expertise in them. This avoids the case when each individual teacher would mark according to his/her own perspective (Dudley-Evans and St John, 2005: 219). In using these bands, we assigned students writing to a band and then to points within the band (maximum was 10.5 points). Finally, the results were recounted for percentage results.

The benefits of band descriptors are greater fairness and standardisation so that we could mark more accurately and consistently. They reduce the variation inherent in the subjectivity of human judgement (Manual for Language Test Development and Examining, 2011:41). This increased the reliability in marking that was also enhanced as there was only one test rater.

The tests fit into the current system of studies in terms of curriculum objectives because they also served as credit tests with 60% for a pass.

8.3.4.2 Questionnaires

Questionnaire is used as a research instrument to collect data on phenomena which cannot be observed, such as attitudes, self-concepts etc. and to obtain information about the research subjects (Seliger and Shohamy 1990: 172). The method of questionnaire survey of students in both groups was chosen to supplement the findings in the tests with

students´opinion on the investigated issue, to examine and compare to what extent these data will support our quantitative findings in the tests.

Figure 2: Analytic descriptors for marking writing

A. Relevance and adequacy of content

0. The answer bears almost no relation to the task set. Totally inadequate answer.
1. Answer of limited relevance to the task set. Possibly major gaps in treatment of topic and/or pointless repetition.
2. For the most part answers the tasks set, though there may be some gaps or redundant information.
3. Relevant and adequate answer to the task set.

B. Compositional organisation

0. No apparent organisation of content.
1. Very little organisation of content. Underlying structure not sufficiently apparent.
2. Some organisational skills in evidence, but not adequately controlled.
3. Overall shape and internal pattern clear. Organisational skills adequately controlled.

C. Cohesion

0. Cohesion almost totally absent. Writing so fragmentary that comprehension of the intended communication is virtually impossible.
1. Unsatisfactory cohesion may cause difficulty in comprehension of most of the intended communication.
2. For the most part satisfactory cohesion though occasional deficiencies may mean that certain parts of the communication are not always effective.
3. Satisfactory use of cohesion resulting in effective communication.

D. Adequacy of vocabulary for purpose

0. Vocabulary inadequate even for the most basic parts of the intended communication.
1. Frequent inadequacies in vocabulary for the task. Perhaps frequent lexical inappropriacies and/or repetition.
2. Some inadequacies in vocabulary for the task. Perhaps some lexical inappropriacies and/or circumlocution.
3. Almost no inadequacies in vocabulary for the task. Only rare inappropriacies and/or circumlocution.

E. Grammar

0. Almost all grammatical patterns inaccurate.
1. Frequent grammatical inaccuracies.
2. Some grammatical inaccuracies.
3. Almost no grammatical inaccuracies. *(ctd.)*

F. Mechanical accuracy I (punctuation)

0. Ignorance of conventions of punctuation.
1. Low standard of accuracy in punctuation.
2. Some inaccuracies in punctuation.
3. Almost no inaccuracies in punctuation.

G. Mechanical accuracy II (spelling)

0. Almost all spelling inaccurate.
1. Low standard of accuracy in spelling.
2. Some inaccuracies in spelling.
3. Almost no inaccuracies in spelling.

Source: Weir in Dudley-Evans and St John, 2005: 219

9 Pre-research: Pilot Study

The ESP e-learning course was piloted in winter term of the 2011/2012 academic year. This was an experimental research design. It was useful as a means of pinpointing what to avoid in full-scale experimental research, it was used for preliminary testing of instruments and to try out treatment before running a full-scale experiment (Seliger and Shohamy, 1990: 138). Research instruments need to be piloted with real subjects. "The results of this phase will provide the researcher with information on revisions, changes that may need to be made so that the instrument can be used with confidence in the research, and provide reliable and valid data" (Selinger and Shohamy, 1990: 192).

9.1 Pre-research sample

The learner profile in the pre-research was represented by learners who had reached at least level B1 in previous studies as defined in the Common European Framework of Reference for Languages. The participants of the pre-research study were 40 undergraduate students enrolled in the course of Business English at the Faculty of Economics and Management of the CULS Prague. The students received content-based instruction in English as a foreign language that was tailored to the needs of their disciplines. They were students mostly of the following fields of studies: Economics and Management, Business and Administration, Economic and Cultural Studies and Trade and Business with Machinery. The majority of participants were students in their first year of studies, a few in their second or third year of studies. There were two groups – a control one and an experimental one. In the control group, the students were taught face-to-face with the textbook English for Business and Correspondence (Kučírková, 2006). The students in the experimental group were taught online in a computer laboratory with computers equipped for multimedia use, and worked in the LMS Moodle, in which the online Business English course was developed.

9.2 Pre-research instruments

In the pre-research we verified the research instruments – questionnaires and tests – and tried to determine whether or not the research instruments function, how they function, the time necessary for the test and completing the questionnaire, and whether or not the students were able to understand the questions in the questionnaire and tests. Piloting was administered under the same conditions as the study proper. Monitoring the results enabled us to make necessary changes in research instruments. The pre-research was conducted on a small set of the population; the participants of the pre-research were 40 undergraduate students enrolled in the course of Business English at the FEM of the CULS Prague. Piloting was useful even though the number of students was small as it provided information about the timing allowance needed for individual tasks, the clarity of task instructions, appropriate layout for the response, how difficult an item was, whether the test was at the right level. It was also necessary to try statistical procedures for data processing as we needed to know if it was possible to analyse the collected data by means of these procedures.

9.2.1 Pre-tests, post-tests

The quantitative pre-research involved both the experimental and the control groups. The experimental group learnt specialist English through the e-learning method, while the control group received traditional instruction. We hypothesised that there would be no statistically significant differences between the outcomes of the two methods. The two groups were assessed by means of pre-tests and post-tests. Afterwards, the data were collected and statistically processed to determine whether one method was more effective than the other.

As this was an online course, the development of a speaking skill was left to a regular class where face-to-face student/teacher interaction was possible. Conversely, the online support should emphasise the development and practice of those skills that are "neglected" in the face-to-face teaching/learning in favour of developing speaking skills. The development of grammatical knowledge was not of primary significance in the course as the students were

already supposed to have a sufficient command of English grammar on the B1 level within the CEFR. The development of vocabulary that can be applied in business and economics was of primary importance. (Kučírková, Vogeltanzová and Jarkovská, 2011).

9.2.2 Questionnaires

The methodology of the pre-research also employed a quantitative analysis of questionnaires that were distributed among 40 students during the last lesson of the course to generate data used for feedback. Not every participant of the research fully completed the last question pertaining to their comments on the course, recommendations, attitudes etc.

9.3 Results and discussion

On the basis of data character, non-parametrical tests were chosen for the statistical analysis. In the case of the evaluation of pre-tests and post-tests with the same group (dependent samples), the Wilcoxon pair test was used. In the case of the evaluation of pre-tests and post-tests with different groups (independent samples), the Mann-Whitney test was used. The tests were carried out with the significance level of 0.05. The Statistica 10 statistical programme was used for the calculation. It was carried out by a colleague from the Department of Statistics. Statistically significant differences between the results in pre-tests and post-tests in single measured activities (skills) were observed. When the p-value was lower than the significance level, the difference was statistically significant. We compared and analysed the results of pre-tests and post-tests of the skills and specialist vocabulary between the control and the experimental groups in order to determine if the e-learning method could be effective and whether there were statistically significant differences between the results of both groups. Then we compared the results of the pre-test and the post-test separately within the control group and the experimental group so that we could determine whether there were statistically significant differences in single skills and vocabulary and whether the students improved or worsened within their groups.

9.3.1 Comparison of the results between the control group and the experimental group and their interpretation

For the evaluation, a non-parametrical analogy of a two-sample t-test was used. The results of the pre-test and the post-test of both groups are presented in Appendix 3, statistical analysis is presented in Appendix 4. In the following table, p-values of pre-tests, which show whether the difference in the results of students of both groups is/is not statistically significant, are presented:

Table 2: Pre-test p-values of both groups

Pre-tests	P-value
Listening	0.069932
Vocabulary	0.036049
Reading	0.155571
Translation	0.818150
Writing	0.473481
Total	0.074213

Source: Author´s own research

Listening pre-tests: The comparison of the results of listening pre-tests show that there is no statistically significant difference between the groups. The p-value is 0.069932, even though the students of the experimental group were a little better.

Vocabulary pre-tests: As far as the vocabulary pre-test is concerned the experimental group was better than the control group. The p-value is 0.036049, so there is a statistically significant difference between both groups in their results.

Reading pre-tests: In the reading comprehension part of the pre-tests, the experimental group was a little better than the control group. From the statistical point of view, however, there is no statistically significant difference between the groups; the p-value, which is 0.155571, is higher than the significance level.

Translation pre-tests: In translation, the results are nearly equal. The p-value is 0.818150, so there is no statistically significant difference in the pre-test results of the two groups.

Writing pre-tests: In writing results, the p-value is 0.473481, so there is no statistically significant difference between the two groups, however, the experimental group is a little worse than the control group.

In the **total results of the pre-test**, the p-value was 0.074213. At the beginning of the academic year, there were no statistically significant differences between the groups. The experimental group was a little better but not statistically significantly.

In the following table, p-values of post-tests, which show whether the difference in the results of students of both groups is/is not statistically significant, are presented:

Table 3: Post-test p-values of both groups

Post-tests	P-value
Listening	0.303996
Vocabulary	0.616775
Reading	0.551776
Translation	0.797198
Writing	0.860431
Total	0.745483

Source: Author´s own research

Listening post-tests: The p-value is 0.303996, which is higher than the significance level. The control group was slightly better than the experimental group, however, there are no statistically significant differences.

Vocabulary post-tests: The results of both groups are nearly equal. From the statistical analysis it is shown that there is no statistically significant difference between the groups; the p-value is 0.616775.

Reading post-tests: The p-value is 0.551776, and thus, there is no statistically significant difference between the two groups. The results of both groups are nearly equal. Reading through the e-learning method can be considered as effective as reading through the face-to-face method.

Translation post-tests: The p-value 0.797198 is higher than the significance level, so there are no statistically significant differences between the groups. Results in both groups are roughly the same.

Writing post-tests: The experimental group is slightly better, but there are no statistically significant differences in the results of the groups. The p-value is 0.860431, which is higher than the significance level.

In the **post-test total results**, the p-value was 0.745483 – higher than the significance level. There were no statistically significant differences between the two groups in the results of the post-test at the end of the winter term.

9.3.2 Interpretation of the results within the experimental group

The results of the pre-test and the post-test within the experimental group are presented in Appendix 3, statistical analysis is presented in Appendix 4. In the following table, p-values of the pre-test and the post-test, which show whether the difference in the results of the students of the experimental group is/is not statistically significant, are presented:

Table 4: Pre-test and post-test p-values of the experimental group

Pre-test and post-test	P-value
Listening	0.049423
Vocabulary	0.001089
Reading	0.012111
Translation	0.012947
Writing	0.740368
Total	0.001163

Source: Author´s own research

Listening pre-test and post-test: p-value is 0.049423 – lower than the significance level. The students worsened a little but not statistically significantly. There is a statistically significant difference between the pre-test and the post-test.

Vocabulary pre-test and post-test: p-value is 0.001089 - lower than the significance level. There is a statistically significant difference between the pre-test and the post-test. The students improved in the knowledge of vocabulary quite a lot.

Reading pre-test and post-test: p-value is 0.012111, so the difference between the pre-test and the post-test is statistically significant. The students improved in reading comprehension.

Translation pre-test and post-test: p-value is 0.012947 – lower than the significance level. There is a statistically significant difference between the pre-test and the post-test in translation; the students showed improvement.

Writing pre-test and post-test: p-value is 0.740368 – higher than the significance level, which means that there is no statistically significant difference between the pre-test and the post-test and the students did not improve in writing.

Total results in the pre-test and the post-test: p-value is 0.001163, which means that there is a statistically significant difference between total results in the pre-test and the post-test. In general, **students improved quite significantly.**

9.3.3 Interpretation of the results within the control group

The results of the pre-test and the post-test within the control group are presented in Appendix 3, statistical analysis is presented in Appendix 4. In the following table, p-values of the pre-test and the post-test indicating whether the difference in the results of the students of the control group is/is not statistically significant, are presented:

Table 5: Pre-test and post-test p-values of the control group

Pre-test and post-test	P-value
Listening	0.148793
Vocabulary	0.000339
Reading	0.000293
Translation	0.014098
Writing	0.586175
Total	0.000151

Source: Author´s own research

Listening pre-test and post-test: p-value is 0.148793 - higher than the significance level of 0.05. Students showed a little improvement in the post-test, but from the statistical point of view, there are no statistically significant differences between the pre-test and the post-test in listening.

Vocabulary pre-test and post-test: p-value is 0.000339 – lower than the significance level. There is a statistically significant difference between the pre-test and the post-test. The students improved quite a lot in the knowledge of specialist vocabulary.

Reading pre-test and post-test: p-value is 0.000293. The students showed great improvement in reading comprehension. There is a statistically significant difference between the pre-test and the post-test.

Translation pre-test and post-test: p-value is 0.014098 − lower than the significance level. There is a statistically significant difference between the pre-test and the post-test scores; the students improved a little.

Writing pre-test and post-test: p-value is higher than 0.05 − 0.586175, there are no statistically significant differences in writing. The students' writing skills neither improved nor worsened.

As far as **total results** are concerned, the students improved quite a lot. The p-value is 0.000151, and thus, the difference between the pre-test and post-test scores is statistically significant. (Kučírková, Kučera and Vostrá Vydrová, 2012a)

9.3.4 Interpretation of the results in the questionnaire pre-research

The analysis of the data is based on statistical calculation (see Appendix 4). The students of both groups were given questionnaires in which they could express their views on the appropriateness of the inclusion of e-learning into the lessons of English for Specific Purposes (Business English) within distance studies and the effectiveness of e-learning as far as the language skills (except for speaking) and vocabulary are concerned. We have distributed 40 questionnaires, the return was 100%.

There were 25 males (62.5%) and 15 females (37.5%) among the respondents. As far as fields of studies are concerned, the most highly-represented field was Trade and Business with Machinery with 11 students (27.5%) participating. There were 9 students from the field of study of Economics and Management and from Business and Administration 9 students as well (22.5%), other fields of study were represented by 11 students (27.5%). 28 respondents (70%) were students in their first year of studies, only 2 respondents (5%) were in their second year of studies and 10 respondents (25%) were students in their third year of studies. As we already mentioned above, half of the respondents took part in the e-learning course, while the other half did not.

32 respondents (80%) thought that the inclusion of e-learning into the ESP lessons for distance students was proper, while only 2 respondents thought that it was improper (5%), the remaining 6 respondents (15%) did not know. In the other six questions, additional

issues were evaluated. We tried to determine whether or not the development of single skills (with the exception of speaking) and vocabulary by using e-learning online course could be as effective as the face-to-face instruction.

The frequency of single responses is shown in the following table:

Table 6: Frequency of responses

	Yes	Rather yes	Rather not	No	Do not know
Overall effectiveness	3 (7.5%)	17 (42.5%)	14 (35.0%)	4 (10.0%)	2 (5.0%)
Reading with comprehension	9 (22.5%)	14 (35.0%)	8 (20.0%)	7 (17.5%)	2 (5.0%)
Listening with comprehension	13 (32.5%)	13 (32.5%)	12 (30.0%)	0 (0.0%)	2 (5.0%)
Writing	22 (55.0%)	10 (25.0%)	5 (12.5%)	1 (2.5%)	2 (5.0%)
Translation	15 (37.5%)	17 (42.5%)	2 (5.0%)	4 (10.0%)	2 (5.0%)
Vocabulary	18 (45.0%)	15 (37.5%)	2 (5.0%)	3 (7.5%)	2 (5.0%)

Source: Author´s own research

Furthermore, we mention the survey of cases, in which the responses proved that there was a statistically significant difference in the dependence on single qualitative signs (gender, field of study and year of study, participation in e-learning course). In all of the following cases, the observed dependence was of a medium strength with a contingent coefficient from 0.3 to 0.65.

Between genders, a statistically significant difference was only found in one question, which assessed the appropriatness of the inclusion of e-learning into the lessons of ESP for distance students. It was demonstrated by the fact that all of the respondents who answered "Do not know" were males (in total, 24% of all males).

Statistically significant differences among responses of students within individual fields of study appeared in several cases. The students of the Trade and Business with Machinery field of study did not have confidence in e-learning or in the effectiveness of the development of the reading with comprehension and listening with comprehension skills.

They responded "Yes" or "Rather yes" in only 3 cases (27. 3%) for reading and in 4 cases (36. 4%) for listening. On the other hand, the students of the other fields of study responded "Yes" or "Rather yes" every time in 6 to 8 cases (63. 6% to 88. 9%). In the evaluation of the influence of e-learning on the development of the skill of translation, the responses of the students of the Business and Administration field of study differed from the others. Extreme responses "Yes" (5 students, i. e. 55. 6%) and "No" (3 students, i. e. 33. 3%), were more frequent than in other fields of study; the response "Yes" occurred in 27. 3% to 44. 4% of surveys, and "No" occurred only once in the Trade and Business with Machinery field of study (9. 1%). It did not occur at all with other students.

Comparing the responses of students of different years of study, generally it is mostly the students of lower years that have confidence in e-learning. However, a statistically significant difference was found only in the evaluation of the e-learning influence on the development of the skill of reading with comprehension. Responses of "Yes" or "Rather yes" were given by 19 students of the first year of study (68. 9%), 1 student of the second year of study (50. 0%) and 3 students of the third year of study (30. 0%).

Statistically significant differences were also found between students who took part in the e-learning course and those who did not. Of those who completed the course, 17 (85%) thought that the inclusion of e-learning into the lessons of ESP for distance students was proper, 2 (10%) felt that it was improper and 1 (5%) did not know. Of those who did not take part in the e-learning course 15 (75%) thought that the inclusion of e-learning into the lessons was proper, while nobody thought that it would be improper, and 5 students (25%) did not know.

Next statistically significant difference was found in responses to the questions of whether or not the development of the skill of reading with comprehension by means of e-learning could be of the same effectiveness as the face-to-face instruction. The students who completed the e-learning course responded in the following way: 5 students (25%) responded "Yes", 9 (45%) "Rather yes", 5 (25%) "Rather not" and 1 (5%) "No". Of the students who did not take part in the e-learning course 4 of them (20%) responded "Yes", 5 (25%) "Rather yes", 3 (15%) "Rather not", 6 (30%) "No" and 2 (10%) did not know.

The last question, in which a statistically significant difference was found, was the question of whether or not the development of the skill of listening with comprehension by means of e-learning could be as effective as the face-to-face instruction. Of the students

who completed the e-learning course, 9 (45%) responded "Yes", 8 (40%) "Rather yes", 3 (15%) "Rather not", responses "No" and the " Do not know" response did not appear. Of the students who did not take part in the e-learning course, 4 (20%) responded "Yes", 5 (25%) "Rather yes", 9 (45%) "Rather not", nobody responded "No", and 2 (10%) did not know.

The last question of the questionnaire was open and it asked for any productive commentory as far as the course was concerned, with the aim of improving the course and using it for self-studies and distance studies. Of the 20 respondents who took part in the e-learning course only 10 (50%) expressed their views on the course. The group of students that did not provide any commentary was comprised of: 5 (25%) males and 5 (25%) females, 4 (20%) students from the Trade and Business with Machinery field of study, 3 (15%) from the Business and Administration field of study, and 3 (15%) from other, non-specified fields of studies. As far as the year of study is concerned, 3 (15%) students were in the third year of studies, 5 (25%) students were in the first year of studies and 2 (10%) were in the second year. The group of students who expressed their views on the e-learning course included 7 (35%) males and 3 (15%) females. Seven (35%) students were from the Economics and Management field of study, 2 (10%) were from the Business and Administration and 1 (5%) was from the Trade and Business with Machinery. All of the students from the Economics and Management field of study and Business and Administration were in their first year of study and 1 (5%) student from Trade and Business with Machinery was in the third year of study. Positive reactions, expressing satisfaction with the lessons were given by 9 (45%) respondents, with answers such as: the lessons were interesting, proper, in order, contributional, constructive etc., with 2 (10%) respondents saying that there was an absolute satisfaction with the course with the responses including: this style of the lessons is absolutely welcome, it was a perfect idea. Only 1 (5%) response was more negative; the student claimed that he had expected to improve his knowledge of vocabulary. But on the other hand, he thought that it was suitable for distance studies but improper for full-time studies. 1 (5%) student asked for activities in which students would create sentences. For 2 (10%) respondents, fill-in-the-blank activities seemed to be difficult, especially with synonyms when more than one answer could be possible. 3 (15%) respondents would welcome more listening and speaking activities. In general, students expressed that they were satisfied with the

possibility to do, finish or revise activities in the Moodle LMS at home, and that the lessons in an electronic form seemed to be practical for them. At the end of this survey, an interesting thing can be pointed out: the students who responded "Do not know" in each question pertaining to the evaluation of the effectiveness of e-learning were all males from the third year of study of the Trade and Business with Machinery field of study, none of whom took part in the e-learning course (Kučírková, Kučera and Vostrá Vydrová, 2012a).

9.3.5 Implications of the findings for the Study Proper

In the pre-research we obtained information on whether the items were too easy or too difficult, and whether the items were well phrased and easily understood by students. On the basis of the results from the pre-research we decided to adjust the course more to the needs of students. The time required to administer the instrument was checked, some activities required in questionnaires into the e-course in Moodle were added, particularly listening and writing activities. The structure of the questionnaire for the final research was also slightly modified. When the results in writing in pre-tests and post-tests were compared, nearly the same results of the groups were found. The experimental group was slightly better, but not statistically significantly. Even if the students of the control group could orally ask questions during the lessons connected with writing and correction of mistakes, the results were not as satisfactory as it could be expected. There were no statistically significant differences in writing in the pre-test and the post-test within the experimental group and this meant that students had not improved in writing. The reason was obvious – written work was checked via email with the comments of a teacher which was probably not sufficient enough for the comprehension of mistakes. Therefore, for the study proper, we added some writing activities to Moodle and concentrated on the structure of business letters more than in the pilot study. As far as listening is concerned, the experimental group was better than the control group. There were no statistically significant differences between the pre-test and the post-test in listening in the control group, which means that the students in this group worsened in this skill. The students probably underestimated listening activities for homework. For the study proper, more listening activities were suggested in Moodle and recommendation for students to practise listening at home, too.

Cronbach´s alpha coefficient was calculated (see Appendix 5) in order to determine whether the tests (research instruments) in the pilot study were consistent, reliable and accurate. Cronbach´s alpha value of the experimental group pre-test was 0.717, however, its value of the experimental group post-test was 0.476. Its value of the control group pre-test was 0.765 and the value in the post-test was 0.565. This statistical calculation proved that pre-tests were reliable, however, post-tests as research instruments were not reliable as the Cronbach´s alpha coefficient was lower than 0.7. It means that the homogeneity of items was not high and the results could be influenced by the chance. For this reason the reliability of post-tests had to be increased in the study proper. For instance in the pre-research, reading was tested in the form of an open-ended comprehension check. In the final research, the form of multiple choice was selected; thus, marking was more objective. In this way we have increased the reliability of the tests because one way by which the reliability of the test can be increased is through changing the items that cause the problem. Another way is through lengthening the data collection instrument by adding more items (Seliger and Shohamy, 1990: 187). We also strengthened the reliability and the content validity of the tests by adding 5 items to the vocabulary subtest and 5 to the listening subtest as we wanted to cover in more detail the content of specialist terminology in the lessons.

9.3.6 Summary of the pre-research

The students of the control group were a little better than the students of the experimental group, but the results were not statistically significant. The e-learning method did not lead to a substantial improvement of language skills, but at the same time it did not worsen them. The pre-research has shown that e-learning is a very good method for extending vocabulary (see 9.3.2).

At the beginning of the academic year, the experimental group was a little better than the control group but from the point of view of statistical significance there were no statistically significant differences between the two groups, except for vocabulary. At the end of the term, the results were more or less the same, there were no statistically significant differences between them. So based on the pre-research, the e-learning method can be considered an equally effective method as the face-to-face method. In some cases, such as acquiring specialist vocabulary, e-learning might even be better.

10 Study Proper

10.1 Experimental research design using the control group and the experimental group

The research was conducted in the winter term of the academic year 2012/2013. Research methods and data collection techniques mainly from quantitative research, partly from qualitative research were employed. The reason for the choice of the methods of quantitative research was to get the figures for the verification of hypotheses – it means to calculate on the basis of figures the statistically significant differences between pre-tests and post-tests between the control group and the experimental group, then within both groups individually, and also to find out the frequency of occurence of research elements (scores) in pre-tests and post-tests, and questionnaires. The research was conducted to evaluate the influence of the e-learning method on students´results in learning business and economic terminology, on the comprehension of listening, reading, writing and translation in the course of Business English.

The independent (treatment = e-learning) and dependent (measurement procedures = tests) variables are the focus of this research. There are other variables whose effects must be controlled. Based on the studies of the literature connected to second language and pedagogical research (Pelikán, 2007; Seliger and Shohamy, 1990; Gavora, 2000; Travers, 1969; Cohen et al, 2007), we tried hard, when planning the research, to control and minimise the variables that can affect the validity of the research. Other variables cannot be used as an explanation for the interaction between the independent and the dependent variables. They must be controlled if an effect is to be attributed to a specific independent variable (i. e. treatment). If they are controlled, then the research is valid and reliable. The part of the research work is to control one´s own examination which is a significant part of the scientific approach of a serious experimenter (Pelikán, 2007: 57). Therefore, the part of our research work is to defend and confirm the validity and reliability. The experimenter needs to use pre-tests which will enable him/her to claim that the groups are similar at the outset of the research (Seliger and Shohamy, 1990: 150); that way the conclusions would be valid. In the real world, in which schools exist, serious limitations are placed on the freedom of experimenters to control the conditions under which they conduct research. As

we mentioned above, in our research, we could not assign subjects to groups through randomisation as the groups were natural and existed prior to the research. Nevertheless, we used the randomisation procedure to assign groups to the treatment, and we made efforts to ensure the control of extraneous variables so that the validity could be heightened.

10.1.1 Internal validity

"Internal validity is concerned with being able to state that the relationship between the independent and the dependent variables is unambiguous and not explainable by extraneous variables" (Seliger and Shohamy, 1990: 105). As stated by Pelikán (2007: 57), a characteristic feature of the science is the control of its own research and critical approach to the interpretation of findings. Seliger and Shohamy (1990: 135) also point out that experimental research must be carefully constructed so that variables could be controlled. We tried hard for the research to be internally and externally valid when we projected the research.

Internal validity of our research is based on the control of the following variables:
Subject (student) variability
In the research we assumed that the two groups were representative samples of the same general population. "The measure of homogeneity of both groups is the standard deviation. The higher the standard deviation, the more varied and more heterogeneous a group is with regard to certain linguistic phenomena". (Seliger and Shohamy, 1990: 217). "The mean of each group is the average score in each group, and it is the sum of all scores of all subjects in a group divided by the number of subjects" (Seliger and Shohamy, 1990: 215). If we observe the mean, it provides us with the information on the average performance of the group on the given tasks. It demonstrates how the group performed as a whole, and it is a significant information. "Measures of variability are very important in describing research data and most of the more complex analyses used in analysing data from experimental research rely heavily on them" (Seliger and Shohamy, 1990: 218). Therefore, the experimental research is supplemented by descriptive statistics. It is reported in the following table.

Table 7: Descriptive statistics – Number of subjects, Mean, Standard deviation

Group	Number of subjects	Mean	Standard deviation
Experimental group Pre-test	49	81%	9%
Control group Pre-test	45	79%	10%
Experimental group Post-test	49	87%	6%
Control group Post-test	45	87%	7%

Source: Author´s own research

The table provides us with a better insight into the data. We see that the **means** of total results of the control and experimental groups are close in pre-tests, even the same in post-tests. When **standard deviations** were computed for both groups (control and experimental), they were also close.

There is a similar spread of scores in pre-tests and post-tests, which indicates similar standard deviations in both groups (Table 8 and Appendix 9). This also means that the variability of the control group is nearly the same as that of the experimental group, and that the groups are more homogenous. It supports the underlying assumption in the research that the two groups are representative samples drawn from the same population to which the research would apply. It means that the research is generalisable and thus applicable outside the immediate research environment. This also supports the validity of the research. The test differences, if any, were due to different teaching methods, not due to other unidentifiable variables (factors).

Size of the research sample

The size of groups is important in the research concerned with group statistical measures such as means or standard deviations. There is no absolute rule regarding the appropriate size of the research sample, but the problems with other variables can be controlled by increasing the size of the research sample. "The greater the size, the smaller the effect of variability" (Seliger and Shohamy, 1990: 98).

In our study proper, we had the sample of 107 students at the beginning of the course, and 94 students at the end of the course. This is a representative sample of the whole population. At the beginning of our research, 53 students were in the experimental group and 54 students in the control group. At the end of the winter term, 49 students remained in the experimental group and 45 students in the control group.

Time

All research was conducted in real time. Time needs to be alloted for the collection of the data and for the exposure of the subjects to an experimental treatment. The researcher needs to be aware of the ways in which the research may be negatively affected because it takes place over time. In a longitudinal study, we do not suppose that our students may be exposed to sources of language input other than those measured by the dependent variable (test) (Seliger and Shohamy, 1990: 101). During the time of the treatment, 13 subjects dropped out of the study, they did not attend classes any more and did not appear on days when data collection (tests) was conducted. Pelikán (2007: 64) calls this "mortality". As a result, if we compare two groups, there can be a different mortality over a period. This should be taken into consideration and if it is possible, to begin with a larger than necessary number of subjects if the study continues for an extended period of time (Seliger and Shohamy, 1990: 101).

Gender

Males and females are expected to have the same influence on the results in educational settings as there was a similar number of males and females in both the experimental and the control groups. It was not possible to influence the number of females and males. However, it happened by coincidence that the number of females in the experimental group (20) was nearly the same as the number of females in the control group (21). The number of males in the experimental group was 29 and in the control group 24. Also in the questionnaire research, the opinions of females and males on the development of single skills in e-learning in the comparison to the face-to-face instruction were not statistically significantly different.

Maturation

Maturation as an influencing variable for internal validity is not significant with adults and did not have to be considered an important variable to control because "adults are cognitively mature" (Seliger and Shahomy, 1990: 101).

Instrumental sensitivity

Subjects can become "test-wise" which means that they can improve their results by having taken a similar test previously and become familiar with its format. The act of taking a test would give the subject an opportunity to practice those things which will comprise the treatment in an experiment (Seliger and Shahomy, 1990: 102). In our experimental research, there was no experience of examined subjects with previous similar testing, so this variable could not influence the treatment. It was not considered the variable that must be controlled and manipulated.

Different teachers

The influence of an experimenter was controlled as it was the same teacher throughout the research for both experimental and control groups.

10.1.2 External validity

The study has external validity if the findings can be applied or generalised to situations outside those in which the research was conducted and if the findings could be applied to the population given by the research sample (Seliger and Shahomy, 1990: 105; Pelikán, 2007: 65). On the basis of the research conducted on the research sample, we could generalise the conclusions to be valid for the whole population (see Subject variability).

Our experimental research fulfilled conditions for external validity because as Selinger and Shohamy (1990: 149) mention it was conducted "under conditions close to those found in educational contexts". Moreover, we minimised factors mentioned by Kalous in Pelikán (2007) - ecological factors - which can influence the research and its interpretation: the room where it is conducted, in which day of the week and at what time the research is conducted. We had the same conditions for the control and experimental groups. The lessons of both groups were in the same building of the FEM and exactly at the same time in the afternoon. The experimental group had the lessons on Tuesday at 12:15 – 15:30, the

control group on Thursday at the same time." If the groups receive the instruction at about the same time of the day, fatigue can be discounted as having a variable effect" (Seliger and Shohamy, 1990: 142). Therefore, the factors such as concentration and tiredness, if any, were controlled by the same conditions for the research of both groups.

Motivation was also controlled. At the beginning of the term students were informed that they would be studying through e-learning (experimental group), and they were informed about the research. Cohen et al (2007: 58) point out that it is proper if the teacher can discuss the research with the subjects involved. As far as the motivation of the students towards studying Business English is concerned, it may be assumed that all students had strong motivation for studies, even if they were from different field of studies, and truly wished to learn it as they had chosen Business English as a voluntary subject. So the motivation, even if it is a highly individual matter, should not influence the students´ results.

The procedure (tests) used to obtain the results must be considered in evaluating the external validity of a study. The test (data collection method) is valid if it measures what we intend it to measure (Manual for Language Test Development and Examining, 2011: 14; Seliger and Shohamy, 1990: 188). The content validity of the tests was examined by comparing the test content with the content of the material which the students were supposed to learn during the winter term of the academic year 2012/2013. A conclusion was made that tests were a good representation of that material and provided evidence for its content. Gavora (2000: 72) states that with research instruments developed by the teacher himself/herself, it is acceptable if he/she relies on his/her own judgement on the validity, i.e., whether all important elements of the study material are included and whether they are in good proportion. Based on his recommendation, the tests were also judged by two colleagues of Business English, and the comparison of our views and their views of the content validity was made. The views were nearly the same, in some cases the items were changed to be more precise and based on the content of the lessons. The students were expected to be able to listen to academic lectures and business talks, to read specialist business and economic texts, to be able to translate them into the Czech language, and to be able to communicate on business topics with business partners in a written form. That is why we tested reading and listening comprehension, knowledge of specialist vocabulary, translation and productive writing, particularly business correspondence. This checked

their ability to use proper English specialist language not only in the academic environment but also in real business situations. The lessons and the tests were focused on these abilities and the tests provided good evidence of their ability to do so. The tests engaged the same skills and language knowledge that would be needed in the target language use domains, particularly educational and vocational ones.

10.2 Research sample

In the study proper there were two experimental groups and two control groups (the sample of 107 students). They were considered as one experimental group (53 students) and one control group (54 students) for the purposes of the research (see Research methodology). In order to gather enough subjects for the experimental research, it is possible to pool the results of more classes (Seliger and Shohamy, 1990: 149; Pelikán, 2007: 54). The students went through placement tests and were on B1 level of the Common European Framework of Reference for Languages.

10.3 Research instruments

10.3.1 Pre-tests, post-tests

In the study proper, we used the experiment as a research method and we used pre-tests and post-tests as research instruments. We compared and analysed the results of the students who studied through the e-learning method (experimental group) and the results of those who were taught through the face-to-face method (control group). We carried out pre-tests with both groups at the beginning of the lessons in the winter term of the academic year 2012/2013 in order to determine the level of input skills (listening, reading, writing, translation) and vocabulary of individual students. After completing the course of Business English in the winter term, both groups sat for post-tests, the purpose of which was to find out the level of skills with the focus on business and economic terminology.

In both tests (pre-tests, post-tests), primarily specialist vocabulary, comprehension of reading and listening, writing and translation were tested. Both of the tests were evaluated in percentage. We used parts of the existing standardised tests as pre-tests. Post-tests, consisting of specialist terminology, were developed by the teacher on the basis of her

experience, and also in the form of standardised tests. There was one exception - the listening post-test was also a part of the existing standardised test.

10.3.2. Questionnaires

The aim of the questionnaire survey was to find out the opinions of students on the influence of the e-learning method on the skills and vocabulary of students in comparison with the face-to-face instruction, and on the implementation of the e-learning course for distance students based on the frequencies of their responses and on the qualitative signs (year of study, field of study). The research was conducted during the last lesson in the winter term 2012/2013. Questionnaires were distributed in Czech in order that the questions would be properly understood by students and answered correctly. The validity of findings was supposed to be strengthened in this way. We used a non-standardised questionnaire that was composed of 11 closed questions with the high degree of explicitness and one open question that was intended for the respondents to evaluate the course, write their comments and also recommendations for future implications as the course in the Moodle LMS can be readily updated. This type of the open question was not used any more as its interpretation represents a more complex and complicated analysis. The extracts in italics are authentic quotations from students´responses translated into English from the open-format of the last item. All 11 questions offered a choice from several possibilities. Anonymity was assured when filling in the questionnaires, so the students tended to share information with the teacher more easily. Anonymous questionnaires, in accordance with ethical considerations in collecting research data ensured that confidentiality of the research data must be maintained (Seliger and Shohamy, 1990: 196). They are supposed to bring true and accurate responses. Anonymity and the high response rate also heightened the validity of findings. Before the study proper research started, pre-research had been conducted. It served for verifying whether the questions in the questionnaire were clear and whether the students understood everything and could answer without problems. The pre-research led to small changes in the questionnaire and tests (see Appendix 12).

10.4 Results and Discussion

For the elementary description of results, absolute and relative frequencies and basic descriptive characteristics, such as the mean and the standard deviation were used as more complex analyses used in analysing data of experimental research rely on them (Seliger and Shohamy, 1990: 218).

The results of the pre-tests and post-tests in the study proper were processed into tables and assessed by means of statistical methods at the department of statistics in the same way as in the pilot study. To test the statistical hypotheses, non-parametrical tests were chosen owing to the nature of the input data, particularly, the Mann-Whitney and Wilcoxon pair tests. In the case of dependent samples, the Wilcoxon pair test was used, whilst the Mann-Whitney test is primarily determined to test independent samples. The significance level is $\alpha = 0.05$. The Statistica 10 programme was used for the statistical calculations. From every table, statistically significant difference between the results in pre-tests and post-tests in single measured activities (skills and specialist vocabulary) was calculated. When the p-value, which expresses the lowest possible value of significance and is determined on the basis of a test criterion value, was lower than the significance level of 0.05, the difference was statistically significant. (Hindls et al, 2007; Svatošová and Kába, 2012).

The results of the pre-tests and post-tests of single skills and of specialist vocabulary between the control group and the experimental group in order to determine whether the e-learning method could be as effective as the method of face-to-face instruction, and whether there were statistically significant differences in the results of both groups were compared and analysed. The results of the pre-test and the post-test separately within the control group and within the experimental group with the aim to determine whether there are statistically significant differences in single skills and specialist vocabulary, and whether the students improved or worsened within their groups were also compared.

The results of the students were not associated with their names or other identifying information because of ethical considerations of the experiment. It is sufficient to present the data in terms of group statistics (Seliger and Shohamy, 1990: 196). The results of the pre-tests and post-tests of the control group and the experimental group are presented in Appendix 9; the statistical analysis is presented in Appendix 10.

10.4.1 Comparison of the results in the pre-tests between the control group and the experimental group and their interpretation

We tried to find out if there were any statistically significant differences in the skills of the students at the beginning of the course in both groups. In the following table, p-values of the pre-tests are presented. They show whether the differences in the results of students of both groups are/are not statistically significant. On this basis, the data analysis was carried out.

Table 8: Pre-test p-values of both groups

Pre-tests	P-value
Listening	0.086470
Vocabulary	0.446861
Reading	0.221575
Translation	0.882666
Writing	0.879680
Total	0.716381

Source: Author´s own research

Listening: The comparison of the results in listening pre-tests shows that there is no statistically significant difference between the groups – p-value is 0.086470, even though students of the experimental group were a little better.

Vocabulary: As far as the vocabulary pre-test is concerned the experimental group is a little better than the control group. P-value is 0.446861, there is no statistically significant difference between both groups in their results.

Reading: From the statistical point of view, there is no statistically significant difference between the groups: p-value 0.221575 is higher than the level of significance. The results of the groups are equal - the mean is 81%.

Translation: In translation, the results are nearly equal. P-value is 0.882666. There is no statistically significant difference in pre-test results of the two groups.

Writing: P-value is 0.879680, there is no statistically significant difference between both groups. The results in writing of the groups are equal – the mean is 77%.

Total results of the pre-test: P-value was 0.716381. At the beginning of the academic year there were no statistically significant differences between the groups.

To summarise, in the pre-tests there were no statistically significant differences in single skills and vocabulary between the groups. They had nearly equal results. Also in total, no statistically significant differences were found. This finding is important as it confirms that the skills and vocabulary knowledge were nearly the same in both groups at the beginning of the course. The students were homogeneous as far as the skills and vocabulary are concerned (Kučírková, Kučera and Vostrá Vydrová, 2013).

These statistically measured results were supported and complemented by the analysis of score frequencies of both groups. Frequencies are used to indicate how often a phenomenon occurs and they are based on counting the number of occurrences (Seliger and Shohamy, 1990: 211). The objective was to find out how frequently certain test scores occured in the results of experimental and control groups and on the basis of this to evaluate students´ improvement. Frequencies expressed in class intervals are a useful way of condensing and summarising the data when the score range is large (Seliger and Shohamy, 1990: 213). We grouped scores into the intervals of fives as the score range was large (scores ranged from 0-100). Thus, the data were condensed into smaller units and frequencies expressed in the score intervals provide us with information on and better insight into the performance of students on tests.

Table 9: Frequency of scores of the experimental and control groups in the pre-tests

Score in %	Experimental group	Control group
Total results	Frequencies	Frequencies
95 - 100	3	1
90 - 94	6	3
85 -89	4	10
80 -84	16	12
75 -79	11	8
70 - 74	4	5
65 - 69	3	3
60 - 64	2	1
55 - 59	0	1
50 - 54	0	0
45 - 49	0	0
40 - 44	0	0
35 - 39	0	1

Source: Author´s own research

In Graph 1, the frequencies of scores of both groups in the pre-tests are reported; the values are taken from a frequency table. The scores are plotted along the baseline and the frequencies are plotted along the vertical axis. The height of each bar corresponds to the frequency of cases in the interval.

Graph 1: Frequency of scores in the pre-tests
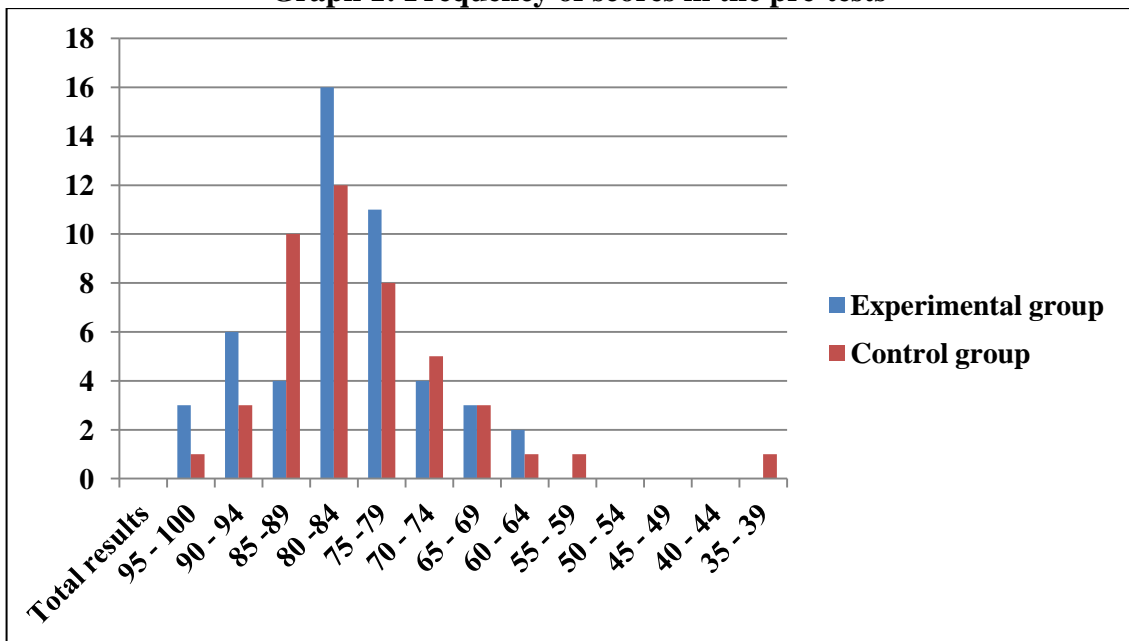
Source: Author´s own research

The experimental group shows quite similar distribution of scores in the pre-test. The test scores in the interval of 80% - 84%, which were very close to the mean 81%, occured the most frequently (16x). Then it was the score in the interval of 75% - 79% (11x). These frequencies support the finding that the group was homogenous (see also the standard deviation of 9% above).

As far as the control group is concerned, the test scores in the interval of 80% - 84% occurred the most frequently (12x). It was nearly the same distribution as with the experimental group. Then the frequencies with a score in the interval of 85% - 89% (10x) and 75% - 79% (8x) followed. Unlike the experimental group, one very low score interval of 55% - 59% occurred. The lowest one was in the interval of 35% - 39%; it was probably caused by the fact that the test of reading comprehension and translation were not saved in the Moodle LMS because the score was 0% in both cases. This group also showed a similar distribution of scores, the range of levels of performance was a bit wider than with the experimental group, but on the whole, the group was also homogenous with regard to the skills and vocabulary examined.

To summarise, these findings in the frequencies of scores support the statistical calculation that at the beginning of the academic year 2012/2013 there were no statistically significant differences between the groups. This is a very significant finding for carrying out post-tests as the groups were found to be homogeneous.

10.4.2 Comparison of the results in the post-tests between the control group and the experimental group and their interpretation

The research was focused on finding out the influence of e-learning on the results of students after completing the course and whether there were any statistically significant differences in the skills of the students between both groups at the end of the e-learning course. Thus, the possibility to exploit the e-learning course for distance students and for the centres of lifelong learning was sought. In Table 10, p-values of the post-tests are presented. They show whether the differences in the results of the students of both groups are/are not statistically significant. When the p-value is higher than the significance level of 0.05, then the differences, if any, are not statistically significant and we can suppose that the e-learning course is of the same effectiveness as the face-to-face course.

Table 10: Post-test p-values of both groups

Post-tests	P-value
Listening	0.043689
Vocabulary	0.338342
Reading	0.131053
Translation	0.791082
Writing	0.906610
Total	0.823319

Listening: P-value is 0.043689, i.e., lower than the significance level. There are statistically significant differences in listening comprehension between the groups.The experimental group is better than the control group.

Sub-hypothesis 1.1 has been refuted.

Vocabulary: The results of both groups are nearly equal. The statistical analysis shows that there is no statistically significant difference between the groups, p-value is 0.338342.

Sub-hypothesis 1.2 has been proved.

Reading: P-value is 0.131053, thus there is no statistically significant difference between both groups. The results of both groups are nearly equal. Reading through the e-learning method can be nearly as efficient as reading through the face-to-face method.

Sub-hypothesis 1.3 has been proved.

Translation: P-value is higher than the significance level – 0.791082, there are no statistically significant differences between the groups. The results in both groups are equal – the mean is 88%.

Sub-hypothesis 1.4 has been proved.

Writing: There are no statistically significant differences in the results of the groups. P-value is 0.906610, which means higher than the significance level. The results of both groups are equal – the mean is 81%.

Sub-hypothesis 1.5 has been proved.

To summarise, in the post-test total results, p-value was 0.823319 – higher than the significance level. There were no statistically significant differences between both groups in the results of the post-test at the end of the winter term. The total results of both groups in the post-tests are equal – the mean is 87%. (Kučírková, Kučera and Vostrá Vydrová, 2013)

The analysis revealed that the e-learning method was as effective as the face-to-face method. Hypothesis 1 that there are no statistically significant differences between the groups has been proved. All sub-hypotheses have been proved except for sub-hypothesis 1.1 (there are no statistically significant differences in listening comprehension between the groups) which has been refuted.The experimental group was better in listening than the control group. There were statistically significant differences in listening comprehension between the groups. The data presented above indicate that the e-learning method had a strong influence on the students´ listening skills which improved considerably. The result of the experiment could be also caused by the fact that at the beginning of the lessons, the experimental group was a bit better than the control group (not statistically significantly) and the e-learning helped them enhance their listening skills even more. In addition, the listening was practised through e-learning in every lesson by means of headphones and repeated without limit on the condition that the other activities were fullfilled by the students. On the contrary, the listening in the face-to-face instruction was carried out by the tape-recorder and other listening activities should be practised at home. It may be assumed from the findings that the students of the control group did not practise listening at home very much.

Consequently, these statistically measured results can be supported and complemented by the analysis of score frequencies of both groups.

In Table 11 and Graph 2, the frequencies of scores in the post-tests of **both groups** are demonstrated:

Table 11: Frequency of scores of the experimental and control groups in the post-tests

Score in %	Experimental group	Control group
Total results	Frequencies	Frequencies
95 -100	4	8
90 -94	14	10
85 -89	15	11
80 - 84	13	11
75 - 79	1	3
70 - 74	1	1
65 - 69	1	1

Source: Author´s own research

Graph 2: Frequency of scores in the post-tests
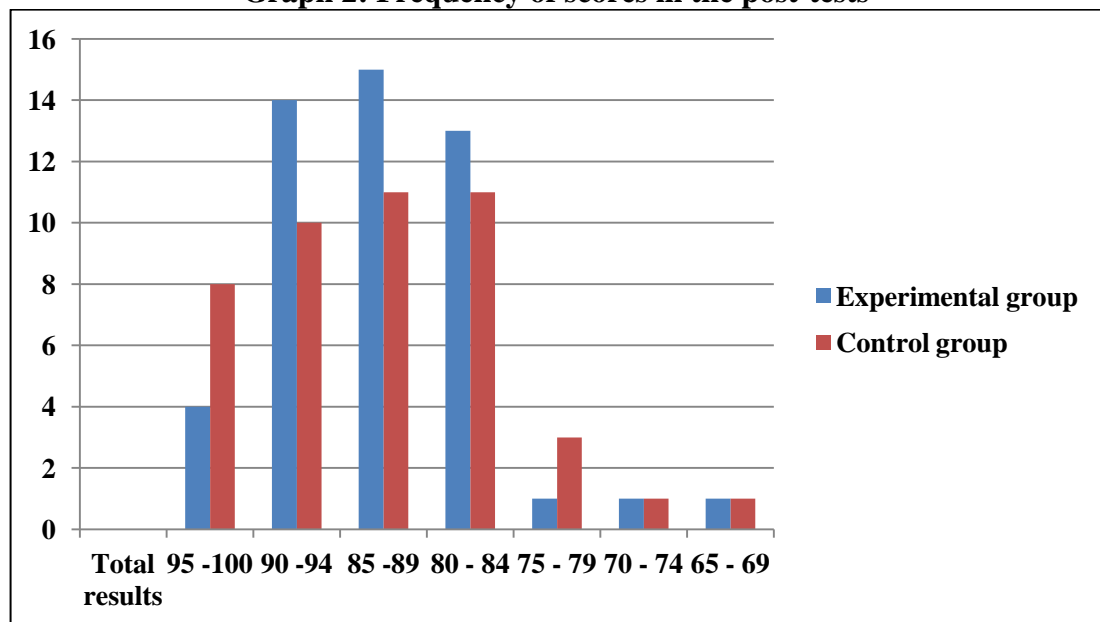
Source: Author´s own research

As far as the experimental group is concerned, unlike the pre-test, the spread of scores was not so wide in the post-test; the amount of score intervals was limited to seven. Graph 2 demonstrates that the most frequent score interval was 85% - 89% (15x), i.e., around the mean of 87%. Then the frequency of intervals of 90% – 94% and 80% - 84% followed. The group was homogeneous as far as the skills and also the knowledge of specialist vocabulary are concerned. The frequencies of score intervals obtained correspond to a low standard deviation of 6% calculated through statistical measuring. Also with the control

group, the spread of scores was lower than in the pre-test. Score intervals of 85% -89% (11x) and 80% - 84% (11x) were the most frequent; the interval 90% - 94% followed. The control group was better in the interval of 95% -100% having a frequency twice as large as the experimental group. The frequencies support quite a low standard deviation of 7%, and thus the homogeneity of the group with regard to the skills and vocabulary.

To summarise, the finding supports and complements the statistical measurement of the p-value that there are no statistically significant differences between both groups in the results of the post-test and that the e-learning method could be considered equally effective as the face-to-face method. The frequencies indicate similar results in the experimental and the control groups as the most frequent score intervals ranged from 80% - 84%, 85% - 89% and 90% - 94% in both groups.

10.4.3 Interpretation of the results within the experimental group

The objective of the analysis was to determine whether there were statistically significant differences in single skills and the vocabulary of the experimental group in the pre-test and the post-test, i.e., whether the students improved or worsened after the completion of the e-learning course. When the p-value is lower than the significance level of 0.05, then the difference is statistically significant. This certifies that students improved in the skills and vocabulary after completing the e-learning course. In Table 12, p-values in the pre-test and the post-test of the experimental group are presented:

Table 12: Pre-test and post-test p-values of the experimental group

Pre-test and post-test	P-value
Listening	0.000000
Vocabulary	0.019960
Reading	0.000015
Translation	0.025111
Writing	0.031994
Total	0.000000

Source: Author´s own research

The results of the data analysis of the pre-test and the post-test within the experimental group are presented as follows:

Listening: P-value is 0.000000 – lower than the level of significance. There is statistically significant difference between the pre-test and the post-test. The students improved very sufficiently in listening comprehension.

Sub-hypothesis 2.1 has been proved.

Vocabulary: P-value is 0.019960 - lower than the level of significance. There is a statistically significant difference between the pre-test and the post-test. The students improved in the knowledge of the vocabulary a little.

Sub-hypothesis 2.2 has been proved.

Reading: P-value is 0.000015, so the difference between the pre-test and the post-test is statistically significant. The students improved in reading comprehension a lot.

Sub-hypothesis 2.3 has been proved.

Translation: P-value is 0.025111 – lower than the level of significance. There is a statistically significant difference between the pre-test and the post-test in translation. The students improved a little.

Sub-hypothesis 2.4 has been proved.

Writing: P-value is 0.031994 – lower than the level of significance, it means that there is a statistically significant difference between the pre-test and the post-test. The students improved in writing a little.

Sub-hypothesis 2.5 has been proved.

To summarise, p-value in the total results is 0.000000. There is a statistically significant difference between the total results in the pre-test and the post-test. In general, the students improved very significantly. All sub-hypotheses have been proved.

Hypothesis 2 has been proved.

These statistically measured results may be supported and complemented by the analysis of score frequencies of the experimental group.

In Table 13 and Graph 3, the frequencies of scores of the experimental group in the pre-test and the post-test are demonstrated:

Table 13: Frequency of scores of the experimental group in the pre-test and the post-test

Score in %	Pre-test	Post-test
Total results	Frequencies	Frequencies
95-100	3	4
90-94	6	14
85-89	4	15
80-84	16	13
75-79	11	1
70-74	4	1
65-69	3	1
60-64	2	0

Source: Author´s own research

Graph 3: Frequency of scores of the experimental group in the pre-test and the post-test
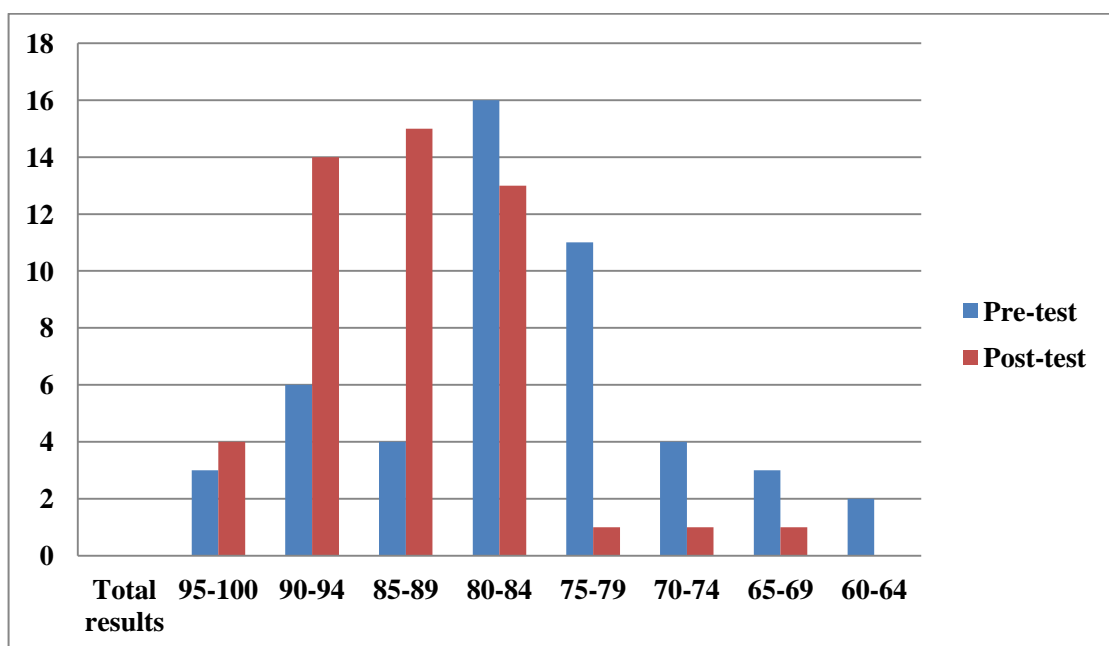
Source: Author´s own research

As far as the experimental group is concerned, the frequencies show the improvement in the skills in the post-test; the frequency of the score interval of 85% - 89% increased from 4x in the pre-test to 15x in the post-test, the frequency of the score interval of 90% - 94%

increased from 6x in the pre-test to 14x in the post-test. The highest score interval of 95% - 100% increased from 3x in the pre-test to 4 x in the post-test. On the contrary, the lowest score interval of 60-64% decreased from 2x to 0 in the post-test; next lowest interval of 65-69% decreased from the occurence of 3x to 1x. We dare say that this improvement in the skills may be attributed mainly to the completion of the e-learning course. The improvement may also be seen in the development of skills and vocabulary. In listening (see Appendix 9), the mean is 75% in the pre-test and 92% in the post-test. It means that the students improved considerably. It was probably caused by a sufficient number of listening activities in the Moodle LMS system. The spread of scores in the pre-test is wider than in the post-test – the standard deviation was 16% and this means that at the beginning of the term they were more heterogeneous as far as the skill of listening is concerned, but in the post-test, the standard deviation is 7% - more than half that in the pre-test (the scores of the students are around the mean of 92%). It means that in the e-learning course they practised listening a lot, probably also at home. In reading, the mean in the pre-test is 81%, in the post-test 91%. The students also improved considerably. The spread of scores in the pre-test is also wider than in the post-test. The standard deviation in the pre-test is 12%, in the post-test 10% as the spread of scores is closer to the mean of 91%. 18 students reached 100% in reading comprehension. The data show that reading activities which were included in every lesson helped the students improve their reading skills. The value of the standard deviation in the post-test indicates that the group is more homogeneous in the skill of reading than in the pre-test. The same is true for the development of vocabulary as the standard deviation in the pre-test is 12% and in the post-test is 9%. In the vocabulary, the mean in the pre-test is 82% and in the post-test 86%. This finding shows the improvement in the knowledge of vocabulary, however, not so considerable. The improvement, even if small, was probably caused by a sufficient number of activities for vocabulary extension in Moodle. Therefore, it may be assumed that e-learning helped this improvement. In translation, the mean in the pre-test is 84%, in the post-test 88% which also means the improvement in the translation skills through e-learning. The standard deviation in the pre-test is 12% and 9% in the post-test. After completing the e-learning course, the experimental group was less variable in the translation skill than at the beginning of the course. As far as writing is concerned, the students improved slightly. The mean in the pre-test was 77% and in the post-test 81%. The standard deviation in the pre-test was nearly

the same as in the post-test (10% -11%). This indicates that the homogeneity in the skill of writing of the group was nearly the same before and after the e-learning course.

To summarise, all sub-hypotheses have been proved, i.e., there were statistically significant differences between the pre-test and the post-test. It may be concluded that the students improved after completing the e-learning course. In total, the mean in the pre-test was 81%, in the post-test 87%. This also proves that the students improved a lot. The mean ranged from 61% to 99% in the pre-test and from 67% to 98% in the post-test. The overall standard deviation in the pre-test was 9%, in the post-test, it was 6%. This means that the experimental group was a homogeneous group with regard to the skills and the vocabulary, the students´results were similar as their spread of scores was close to the mean.

10.4.4 Interpretation of the results within the control group

The objective of the data analysis was to identify whether there were statistically significant differences in the single skills and the vocabulary of the control group and whether the students improved or worsened after completing the face-to-face course. The difference is statistically significant on the condition that the p-value is lower than the significance level of 0.05. This means that students improved in the skills and the vocabulary after completing the face-to-face course. In Table 14, p-values in the pre-test and the post-test of the control group are presented:

Table 14: Pre-test and post-test p-values of the control group

Pre-test and post-test	P-values
Listening	0.000002
Vocabulary	0.000339
Reading	0.000049
Translation	0.016384
Writing	0.019239
Total	0.000000

Source: Author ´s own research

The results of the data analysis of the pre-test and the post-test within the control group are presented as follows:

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Listening: P-value is 0.000002 - lower than the level of significance. The students improved a lot in the post-test. From the statistical point of view, there are statistically significant differences between the pre-test and the post-test in listening.
Sub-hypothesis 3.1 has been proved.

Vocabulary: P-value is 0.000339 – lower than the level of significance. There is a statistically significant difference between the pre-test and the post-test. The students improved quite a lot in the knowledge of the specialist vocabulary.
Sub-hypothesis 3.2 has been proved.

Reading: P-value is 0.000049. The students showed great improvement in reading comprehension. There is a statistically significant difference between the pre-test and the post-test.
Sub-hypothesis 3.3 has been proved.

Translation: P-value is 0.016384 – lower than the level of significance. There is a statistically significant difference in the pre-test and the post-test. The students improved a little.
Sub-hypothesis 3.4 has been proved.

Writing: P-value is lower than the level of significance – 0.019239. There are statistically significant differences in writing. The students improved but not very much.
Sub-hypothesis 3.5 has been proved.

To summarise, all sub-hypotheses have been proved. As far as the total results are concerned, the students improved a lot in all skills and the vocabulary. P-value is 0. 000000, thus, the difference between the pre-test and the post-test is statistically significant.
Hypothesis 3 has been proved.

These statistically measured results may be supported and complemented by the analysis of the score frequencies of the control group.

In Table 15 and Graph 4, the frequencies of scores of the **control group** in the pre-test and the post-test are demonstrated:

Table 15: Frequency of scores of the control group in the pre-test and the post-test

Score in %	Pre-test	Post-test
Total results	Frequencies	Frequencies
95-100	1	8
90-94	3	10
85-89	10	11
80-84	12	11
75-79	8	3
70-74	5	1
65-69	3	1
60-64	1	0
55-59	1	0
50-54	0	0
45-49	0	0
40-44	0	0
35-39	1	0

Source: Author´s own research

Graph 4: Frequency of scores of the control group in the pre-test and the post-test

Source: Author´s own research

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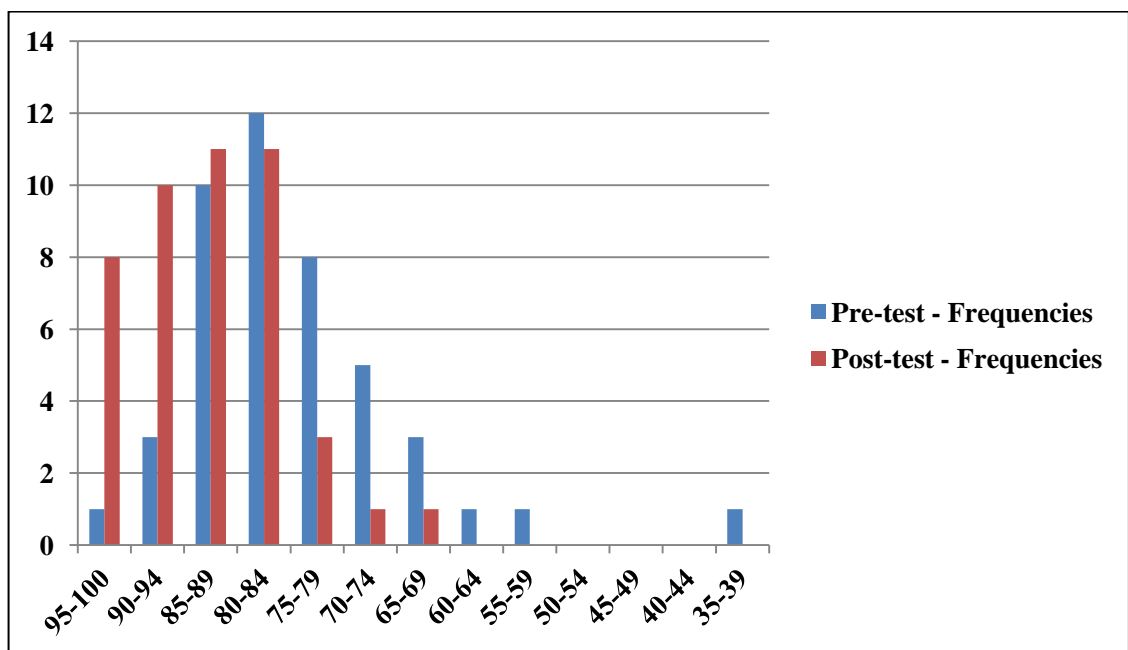
The highest score interval in the pre-test of the control group was 80% - 84% (12x) – it is the same highest interval as it is with the experimental group. The improvement in the post-test can be seen as the frequency of the score interval of 90% - 94% increased from 3x in the pre-test to 10x in the post-test and also the frequency in the interval of 95% - 100% increased from 1x in the pre-test to 8x in the post-test.

The improvement is also seen in the development of the skills and the vocabulary. In listening (see Appendix 9), the mean is 69% in the pre-test and 86% in the post-test. The students improved considerably in the listening comprehension. The spread of scores was similar in the pre-test and the post-test, the standard deviation was 13% - the same in both tests. The students improved quite a lot but the group was not so homogeneous in the listening skills. In reading, the mean in the pre-test was 81% and in the post-test 93%. This finding shows that the students improved considerably in reading comprehension, a lot of them achieved 100% score. The standard deviation in the pre-test was very high – 22% which suggests that there was a very wide spread of scores in the pre-test and the group seemed to be quite heterogeneous. The standard deviation was high as two students achieved 0% in reading comprehension. It may be attributed to their technical mistake – they probably did not save their results. However, after the completion of the course, the standard deviation was 12%, the students´spread of scores got closer to the mean and the group was more homogeneous as far as the reading skills are concerned. In vocabulary, the mean is 80% in the pre-test and 88% in the post-test. This finding suggests that the students improved quite a lot in the knowledge of the vocabulary after completing the course. The spread of scores was lower than in the pre-test: the standard deviation (SD) was 9%. It means that the group was more homogeneous with regard to the vocabulary after completing the course than at the beginning of the term. In translation, the mean was 82% in the pre-test and 88% in the post-test. The finding shows the improvement, even if not so big. The homogeneity of the group was also bigger (9% SD) in comparison to the pre-test (20% SD). As far as writing is concerned, the students improved a little. The mean in the pre-test was 77%, in the post-test 81%. The standard deviations were nearly equal: in the pre-test 9% and in the post-test 10%.

To summarise, the hypothesis has been proved, i.e., there were statistically significant differences in the results between the pre-test and the post-test. In total, the mean in the pre-test was 79%, in the post-test 87%. It may be concluded that the students improved

after completing the face-to-face course a lot. The overall standard deviation in the pre-test was 10%, in the post-test 7%. This means that the control group was a homogeneous group with regard to the skills and the vocabulary.

Summary

Comparison of the results between the control group and the experimental group

For the evaluation, a non-parametrical analogy of a two-sample *t*-test was used. As Table 16 shows, all *p*-values in the tests for the pre-test are greater than the level of significance 0.05 and therefore, in the pre-tests there were no statistically significant differences in single skills. At the beginning of the academic year, the experimental group was a little better than the control group but from the point of view of the statistical significance there were no statistically significant differences between the groups.The control and the experimental group have nearly equal results. Also in total, there were no statistically significant differences. Table 16 presents the results of testing differences between the experimental group and the control group for the pre-test and the post-test.

Table 16: Results of testing differences between the experimental group (EG) and the control group (CG) for the pre-test and the post-test

Skills	Pre-test		Post-test	
	p-value	EG and CG Comparison	*p*-value	EG and CG Comparison
Reading	0.221575	EG equal CG	0.131053	EG very slightly worse than CG
Listening	0.086470	EG a little better than CG	0.043689	EG better than CG
Writing	0.879680	EG equal CG	0.906610	EG equal CG
Translation	0.882666	EG equal CG	0.791082	EG equal CG
Vocabulary	0.446861	EG a little better than CG	0.338342	EG very slightly worse than CG
Total results	0.716381	EG a little better than CG	0.823319	EG equal CG

Source: Author´s own research

At the end of the term, the total results in the post-tests were absolutely equal, there were no statistically significant differences. The students of the experimental group were statistically significantly better only in the listening comprehension. They had the same

results in the translation and writing as the control group, and very slightly worse results in the vocabulary and reading comprehension than the control group, but not statistically significantly.

The frequencies of the high score intervals increased in both groups, more substantially in the experimental group. This finding may be attributed to the e-learning method (purely online course) that seems to be considerably effective and can be considered as an equally effective method as the face-to-face method. Moreover, it was shown that the students using e-learning may achieve even better results in some skills than the students taught face-to-face, such as in the listening comprehension in this study. (The means of the results in the listening comprehension were the following: 92% of the experimental group x 86% of the control group in the post-test).

Comparison of the results within single groups

As Table 17 shows, all *p*-values in the tests are lower than the level of significance 0.05 and therefore, the differences between the observed skills of Business English at the beginning and at the end of the term were statistically significant both in the experimental group and in the control group. The students in both groups improved their skills and vocabulary. Table 17 illustrates the results of testing differences between the pre- test and the post-test for the experimental group and the control group.

Table 17: Results of testing differences between the pre-test and the post-test for the experimental group and the control group

Skills	Experimental group		Control group	
	p-value	Improvement	*p*-value	Improvement
Reading	0.000015	A lot	0.000049	A lot
Listening	0.000000	A lot	0.000002	A lot
Writing	0.031994	A little	0.019239	A little
Translation	0.025111	A little	0.016384	A little
Vocabulary	0.019960	A little	0.000339	Quite a lot
Total results	0.000000	A lot	0.000000	A lot

Source: Author´s own research

The experimental group improved a lot in reading and listening, a little in writing, translation and vocabulary. The control group improved a lot also in reading and listening,

a little in writing and translation and quite a lot in vocabulary, more than the experimental group. The reason could be in the help of the teacher with immediate translation or explanation in the face-to-face instruction, or a possibility to do activities in the Moodle LMS at home.

10.4.5 Reliability of tests

For a valid interpretation of test results, scores must have acceptable reliability. **Reliability provides information on whether the research instrument (data collection procedure) is consistent, reliable and accurate** (Gavora, 2000: 73; Seliger and Shohamy, 1990: 185; Pelikán, 2007: 67; Manual for Language Test Development and Examining, 2011: 23). A good way of confirming reliability is to find out to what extent the research instrument is consistent, i.e., to what extent its items are homogenous and whether they are related to one another and measure the same thing (Seliger and Shohamy, 1990: 190). It is calculated statistically by means of Cronbach´s Alpha (Gavora, 2000: 74; Brown, 1997). The reason for its use is its unambiguity, understandability and its implementation of the calculation procedure in most statistical programmes. It was thouroughly described by Lee Cronbach in 1951 (Cronbach, 1951; Cronbach, 1970). Reliability is expressed as Cronbach´s Alpha coefficient ranging from 0.00 to 1.00. In the case that the coefficient reaches the value of 1.00, the interpretation is that the data are not influenced by the chance at all. Cronbach´s alpha coefficient in the top third of the range i.e., from 0.7 to 1.00 is considered acceptable, the data are not influenced by the chance. The higher the coefficient, the more reliable the procedure is (Manual for Language Test Development and Examining, 2011: 17; Seliger and Shohamy, 1990: 187; Brown, 1998). In order to increase the reliability of the research instrument in the study proper, we lengthened the data collection instrument used in the pre-research by adding more items, and we removed the items that caused the problem (comprehension questions in reading). With the help of a colleague from the Department of Statistics, it was measured to what extent the research instruments were consistent, i.e., to what extent their elements are homogeneous. The higher the homogeneity, the higher the reliability of the research instrument (Gavora, 2000: 74). The reliability of the pre-tests and the post-tests was calculated mathematically by means of Cronbach´s alpha coefficient with the help of a colleague from the Department of Statistics (see Appendix 11).

Experimental group

Cronbach´s alpha coefficient was calculated with the following variables:

Pre-testEx_Listening Pre-testEx_Vocabulary Pre-testEx_Reading Pre-testEx_Translation Pre-testEx_Writing Pre-testEx_Total

Cronbach´s alpha value of the experimental group pre-test is shown in Table 18:

Table 18: Reliability statistics

Cronbach's Alpha	N of Items
0,752	6

Source: Author´s own research

Cronbach´s alpha value of 0.752 indicates the high consistency and reliability of the pre-test of the experimental group. The constructed model ANOVA with Cochran´s Test is statistically conclusive (see Appendix 11)

Cronbach´s alpha coefficient was calculated with the following variables:

Post-testEx_Listening Post-testEx_Vocabulary Post-testEx_Reading Post-testEx_Translation Post-testEx_Writing Post-testEx_Total

Cronbach´s alpha value of the experimental group post-test is shown in Table 19:

Table 19: Reliability statistics

Cronbach's Alpha	N of Items
0,746	6

Source: Author´s own research

Cronbach´s alpha value of 0.746 indicates high consistency and reliability also as far as the post-test of the experimental group is concerned

Control group:

Cronbach´s alpha coefficient was calculated with the following variables:
Pre-testCo_Listening Pre-testCo_Vocabulary Pre-testCo_Reading Pre-testCo_Translation Pre-testCo_Writing Pre-testCo_Total

Cronbach´s alpha value of the control group pre-test is shown in Table 20:

Table 20: Reliability statistics

Cronbach's Alpha	N of Items
0,745	6

Source: Author´s own research

Cronbach´s alpha value of 0.745 indicates high consistency and reliability as far as the pre-test of the control group is concerned.

Cronbach´s alpha coefficient was calculated with the following variables:
Post-testCo_Listening   Post-testCo_Vocabulary   Post-testCo_Reading   Post-testCo_Translation Post-testCo_Writing Post-testCo_Total

Cronbach´s alpha value of the control group post-test is shown in Table 21:

Table 21: Reliability Statistics

Cronbach's Alpha	N of Items
0,749	6

Source: Author´s own research

Cronbach´s alpha value of 0.749 indicates high consistency and reliability as far as the pre-test of the control group is concerned.

The calculation proves that the research instruments (tests) are consistent, i.e., the items are homogeneous. Cronbach´s alpha value exceeded 0.7 in all measured cases (in all pre- and post-tests with both the experimental and the control groups). The homogeneity of items is high, the reliability of the research instruments (tests) is also high.

Reliability is in close relation to the test validity. To be valid, the test must have a high rate of reliability (Manual for Language Test Development and Examining, 2011: 16; Byčkovský, 1984 in Pelikán, 2007: 68) Based on statistical measurements and on the efforts at the beginning of the research to minimise the breach of the validity we dare state that the tests are reliable and also valid.

10.4.6 Interpretation of the results in the questionnaire survey

The data analysis was based on statistical calculation (see Appendix 12, 13). Students of both groups were given questionnaires in which they expressed their opinions on the appropriateness of the inclusion of e-learning into the lessons of Business English for distance studies and the effectiveness of e-learning as far as the language skills (except for speaking) and vocabulary are concerned. 94 questionnaires in the paper form were distributed among the students during the last lesson in the winter term 2012/2013. We did not have any problem with a low response rate, as all questionnaires were collected personally. The return was 93%. In seven questionnaires, the students did not respond to some questions and therefore, these questionnaires were excluded from the analysis. The data collected were processed quantitatively, the last open question qualitatively.

10.4.6.1 Interpretation of the frequencies of single variables

There were 51 males (58.6%) and 36 females (41.4%) among the respondents. As far as fields of studies are concerned, the most highly-represented specified field was that of Business and Administration with 23 students (26.4%). Then it was Economics and Management field of study with 19 students (21.8%). Trade and Business with Machinery was represented by 17 students (19.6%). "Another" (not specified field of study) was represented by 28 students (32.2%) participating. 68 respondents (78.2%) were students in their first year of studies, only 7 respondents (8%) were in their second year of studies and 12 respondents (13.8%) were students in their third year of studies. As we already mentioned above, 47 respondents took part in the e-learning course, while 40 did not.
71 respondents (81.6%) thought that the inclusion of e-learning into the ESP lessons for distance students was proper, while only 3 respondents thought that it was improper (3.4%), the remaining 13 respondents (15%) did not know.

In the other six questions, based on the opinions of students, the objective was to determine whether or not the development of single skills and vocabulary by using the e-learning online course could be as effective as the face-to-face instruction. Under the same effectiveness it is understood that the results of pre-tests and post-tests of students studying through the e-learning online course and those studying through the face-to-face instruction will be relatively the same, i.e., from the statistical point of view, there will be no statistically significant differences in the results between both groups. The choice of the responses was "Yes, rather yes, no, rather no, do not know". The frequency of single responses is shown in Table 22 and graphs:

Table 22: Frequency of responses

	Yes	Rather yes	Rather no	No	Do not know
Overall effectiveness of e-learning course	6 (6.9%)	38 (43.7%)	31 (35.6%)	11 (12.6%)	1 (1.1%)
Reading with comprehension	11 (12.6%)	34 (39.1%)	31 (35.6%)	10 (11.5%)	1 (1.1.0%)
Listening with comprehension	22 (25.3%)	38 (43.7%)	15 (17.2%)	9 (10.3%)	3 (3.4%)
Writing	24 (27.6%)	44 (50.6%)	10 (11.5%)	5 (5.7%)	4 (4.6%)
Translation	28 (32.2%)	33 (37.9%)	17 (19.5%)	7 (8.0%)	2 (2.3%)
Vocabulary	36 (41.4%)	24 (27.6%)	17 (19.5%)	4 (4.6%)	6 (6.9%)

Source: Author´s own research

Graph 5: Opinions on the overall effectiveness of the e-learning course

Source: Author´s own research

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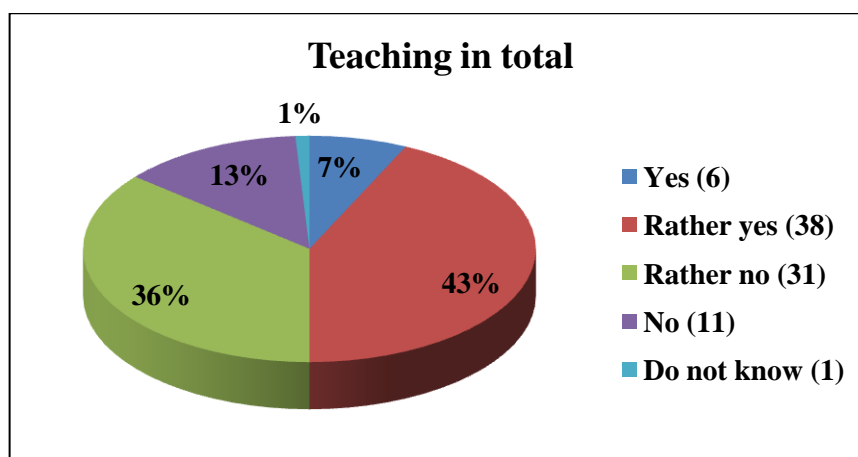
As far as <u>the overall effectiveness of the e-learning course is concerned,</u> 44 students (50.6%) thought that using the e-learning online course could be as effective as the face-to-face instruction. Out of this number of students, 29 took part in the e-learning course, 15 of them did not. 6 (6.9%) respondents were persuaded on 100% ("Yes"), 38 respondents (43.7%) thought "Rather yes". 42 students (48.2%) thought that the e-learning course probably could not be of the same effectiveness as the face-to-face instruction. Out of this number, 17 took part in the e-learning course, 25 did not. One student (1.1%), who took part in the e-learning course, did not express any opinion. The findings in the opinions on the development of single skills show the students´positive attitude to e-learning.

Graph 6: Opinions on the development of reading with comprehension

Reading with comprehension

- Yes (11) — 13%
- Reather yes (34) — 39%
- Reather no (31) — 36%
- No (10) — 11%
- Do not know (1) — 1%
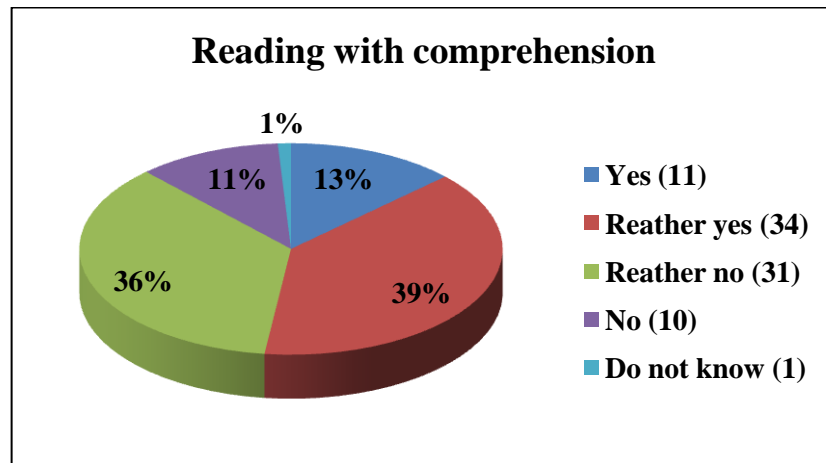
Source: Author´s own research

<u>The development of reading</u> in the e-learning course was considered as being the same as through the face-to-face instruction by 45 students (51.7%). 29 of them took part in the e-learning course, 16 did not. 41 students (47.1%) thought that the development of the skill through e-learning could not be as effective as through the face-to-face instruction. 18 of them took part in the e-learning course, 23 did not. One student (1.1%), who did not take part in the e-learning course, responded "Do not know".

Graph 7: Opinions on the development of listening with comprehension

Listening with comprehension

3%

10%

17%

45%

25%

■ Yes (22)
■ Reather yes (38)
■ Reather no (15)
■ No (9)
■ Do not know (3)
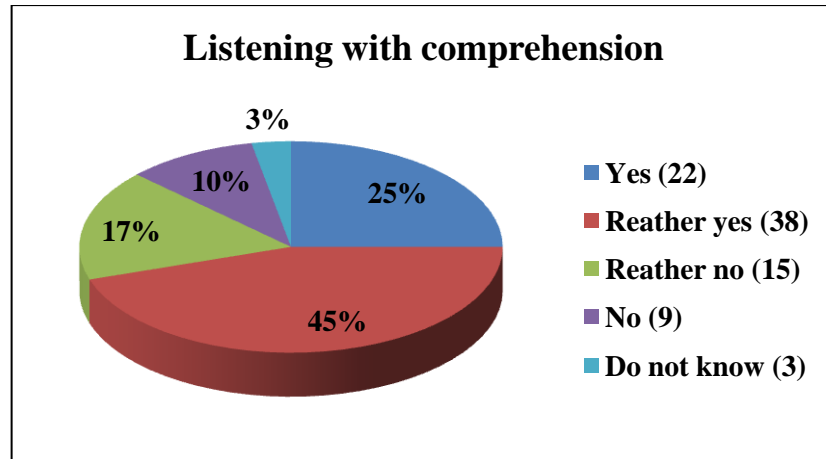
Source: Author´s own research

As far as <u>listening</u> is concerned, 60 students (69%) had confidence in the effectiveness of e-learning in comparison with the face-to-face instruction. 34 of them took part in the e-learning course, 26 did not. 24 students (27.6%) thought of this issue more negatively – in their opinion the development of listening was not as effective through the e-learning online course as through the face-to-face instruction. Three (3.4%) students (one took part in the e-learning course, two did not) did not have any opinion on this issue.

Graph 8: Opinions on the development of writing

Writing

6%

5%

11%

50%

28%

■ Yes (24)
■ Reather yes (44)
■ Reather no (10)
■ No (5)
■ Do not know (4)
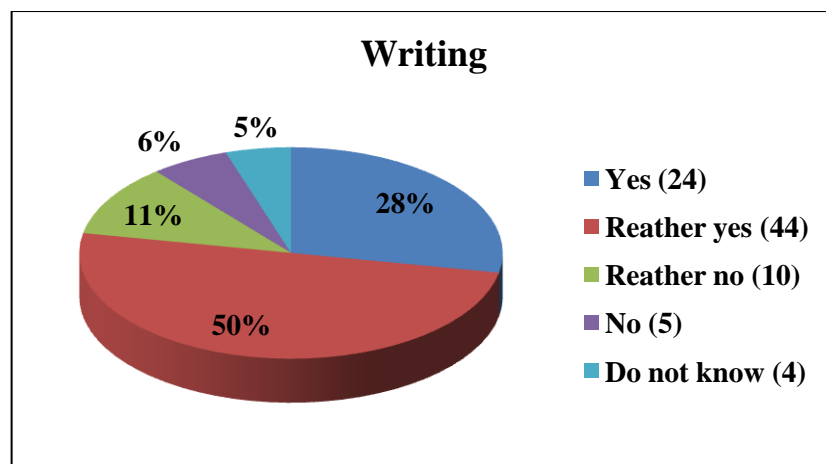
Source: Author´s own research

The development of <u>writing</u> through e-learning was thought to be very effective by many students. 68 students (78.2%) thought that it could be as effective as the face-to-face

instruction. 39 respondents took part in the e-learning online course, 29 did not. Only 15 students (17.2%) thought that it was not as effective as the face-to-face instruction. Four students (4.6%), who did not take part in the e-learning course, responded "Do not know".

Graph 9: Opinions on the development of translation
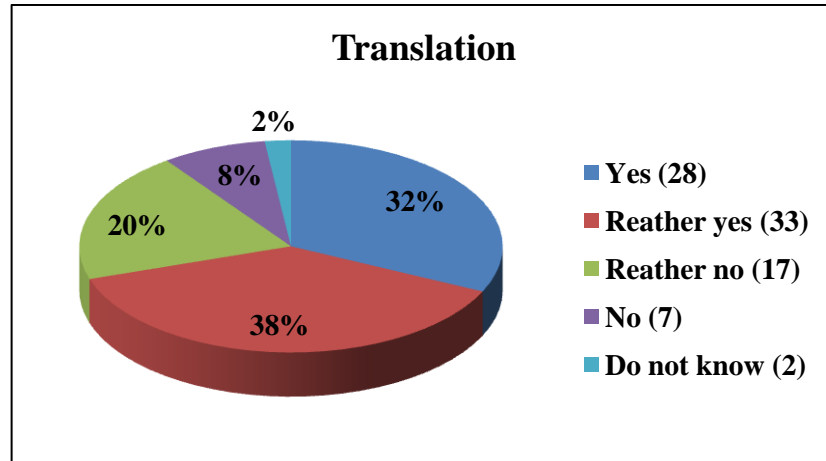
Source: Author´s own research

Translation learnt through the e-learning online course was thought to be of the same effectiveness as the face-to-face instruction by 61 (70.1%) students (35 took part in the e-learning online course, 26 did not) and less or not effective by 24 (27.6%) students (12 took part in the course, 12 did not). 2 (2.3%) students, who did not take part in the e-learning online course, did not express their opinion.

Graph 10: Opinions on the development of vocabulary
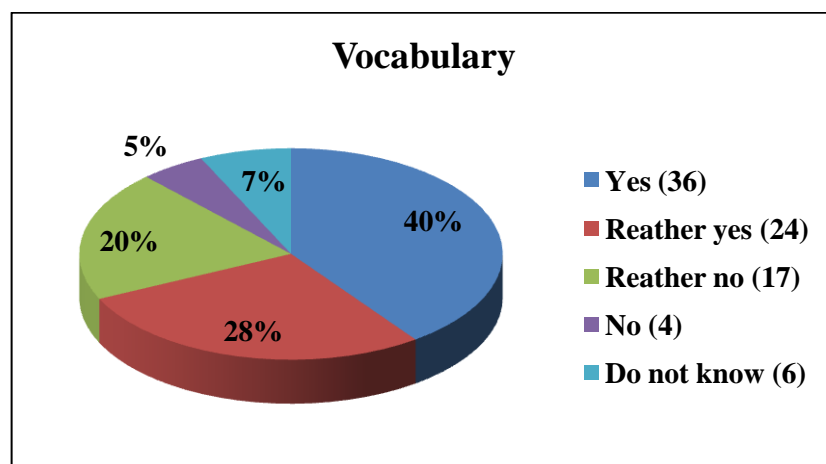
Source: Author´s own research

The development of <u>vocabulary</u> through the e-learning online course was viewed to be of the same effectiveness as the face-to-face instruction by 60 (69.0%) students (31 took part in the e-learning course, 29 did not), and not to be of the same effectiveness by 21 (24.1%) students (13 took part in the e-learning course, 8 did not). 6 (6.9%) students did not know what to answer. Three of them took part in the e-learning course, 3 did not.

Summary

The opinions of the students as to whether or not the effectiveness of the e-learning course and the face-to-face instruction was the same were influenced by the participation in the e-learning course. The opinions were evaluated separately for the experimental group (students who took part in the e-learning course) and the control group (students without the e-learning course). The results of this analysis are shown in Table 23.

Table 23: Results of the questionnaire analysis for the experimental group (EG), the control group (CG) and for both groups taken together

Skills	Yes or Rather yes			Rather no or No			Do not know		
	EG	CG	Total	EG	CG	Total	EG	CG	Total
Overall effectiveness of e-learning	29	15	44 (50.6%)	17	25	42 (48.2%)	1	0	1 (1.1%)
Reading	29	16	45 (51.7%)	18	23	41 (47.1%)	0	1	1 (1.1%)
Listening	34	26	60 (69.0%)	12	12	24 (27.6%)	1	2	3 (3.4%)
Writing	39	29	68 (78.2%)	8	7	15 (17.2%)	0	4	4 (4.6%)
Translation	35	26	61 (70.1%)	12	12	24 (27.6%)	0	2	2 (2.3%)
Vocabulary	31	29	60 (69.0%)	13	8	21 (24.1%)	3	3	6 (6.9%)

Source: Author´s own research

The results indicate that in most cases, negative views of the overall effectiveness of the e-learning course suggest that those students who expressed their negative opinion on the effectiveness did not take part in the e-learning course. On the other hand, as far as the

positive attitude to the e-learning effectiveness is concerned, the number of students who took part in the e-learning online course prevailed. The findings in opinions on the development of single skills show the students´positive attitude towards e-learning. As far as the development of single skills is concerned, more than half of the respondents (52% - 78%) thought (in all questions relating to it) "Yes" or "Rather yes", i.e., that the results of the pre-tests and the post-tests of the students studying through the e-learning online course and those studying through the face-to-face instruction would be relatively the same.

10.4.6.2 Interpretation in dependence on qualitative signs

Most responses proved that there was no statistically significant difference in the dependence on single qualitative signs (gender, field of study and year of study, participation in the e-learning course). The survey of cases in which responses proved that there was a statistically significant difference in the dependence on single qualitative signs is mentioned bellow. In all of these cases, the observed dependence was of a medium strength with a contingent coefficient around 0.3 (see Appendix 11, 12).

Analysis of qualitative signs in dependence on gender

In Table 24, p-values of questionnaire items in dependence on gender are shown:

Table 24: Questionnaire item p-values in dependence on gender

Questionnaire item	P-value
No. 5	0.65113
No. 6	0.29795
No. 7	0.51013
No. 8	0.09850
No. 9	0.12098
No. 10	0.50343
No. 11	0.03532

Source: Author´s own research

Between genders a statistically significant difference was found only in item (question) 11, which asked if the development of vocabulary within the e-learning online course could be as effective as the face-to-face instruction. 34 (39.1%) males and 26 (29.9%) females

answered "Yes" or "Rather Yes"; 12 (13.8%) males and 9 (10.3%) females responded "No" or "Rather no"; 5 (5.8%) males and 1 (1.2%) females responded "Do not know". More males than females believed in the effectivity of e-learning in the development of the vocabulary. It may be assumed that this was caused by the nature of males, who are more technically oriented and prefer information and communication technologies to the face-to-face method. P-value was 0.03532, i.e., lower than the significance level of 0.05. The analysis revealed that there was a statistically significant difference in responses between males and females. The contingent coefficient, which determines the dependence strength, is 0.3011162. The value of the coefficient is not high, the dependence strength between variables (response to item 11 and gender) is not high either, it is of a medium strength.

In all other items, there were not any statistically significant differences between the responses of students and their gender. P-values were higher than the significance level. It may be assumed that the variable, such as gender, did not have any influence on the students´responses.

Analysis of qualitative signs in dependence on the field of study

In Table 25, p-values of the questionnaire items in **dependence on the field of study** are shown:

Table 25: Questionnaire item p-values in dependence on the field of study

Questionnaire item	P-value
No. 5	0.34400
No. 6	0.99202
No. 7	0.88563
No. 8	0.71492
No. 9	0.93617
No. 10	0.15651
No. 11	0.05180

Source: Author´s own research

Statistically significant differences among the responses of students within <u>individual fields of study </u>did not appear at all. P-values were higher than the significance level of 0.05. It may be concluded on the basis of the questionnaire analysis that the field of study did not represent any variable that could influence this research. Most students of all fields

of studies had confidence in the inclusion of e-learning into distance studies (71 = 81.6%) and more than half of the students (from 44 to 68) students believed in the effectiveness of the development of the skills and vocabulary in all questions.

Analysis of qualitative signs in dependence on the year of study

In Table 26, p-values of the questionnaire items in **dependence on the year of study** are shown:

Table 26: Questionnaire item p-values in dependence on the year of study

Questionnaire item	P-value
No. 5	0.28419
No. 6	0.84221
No. 7	0.97364
No. 8	0.59257
No. 9	0.72488
No.10	0.59926
No.11	0.28449

Source: Author´s own research

When the responses of students of <u>different years of study</u> were compared and statistically analysed, there was no statistically significant difference between the year of study of the students and the responses to questions $5 - 11$. All the p-values were higher than the significance level of 0.05. The year of study did not influence the opinions of the students on the effectiveness of e-learning in the skills and the vocabulary in the research.

Analysis of qualitative signs in dependence on the participation in the e-learning course

In Table 27, p-values of the questionnaire items in **dependence on the participation in the e-learning course** are reported:

Table 27: Questionnaire item p-values in dependence on the participation in the e-learning course

Questionnaire item	P-value
No. 5	0.04628
No. 6	0.03815
No. 7	0.10966
No. 8	0.33778
No. 9	0.13193
No. 10	0.31291
No. 11	0.88110

Source: Author´s own research

Statistically significant differences in the responses to question 5 and 6 were found between the students who participated in the e-learning course and those who did not. Of those who completed the course, 42 (89.4%) thought that the inclusion of e-learning into the ESP for distance students was proper, 3 (6.4%) felt that it was improper and 1 (2.1%) did not know. Of those who did not take part in the e-learning course 29 (72.5%) thought that the inclusion of e-learning into the distance studies was proper, 3 (7.5%) thought that it was improper, and 13 (32.5%) students did not know. P-value was 0.04628, lower than the significance level. It indicated that there was a statistically significant difference in responses to question 5 about the inclusion of e-learning to distance studies between those who participated in the e-learning course and those who did not. It was also found out that there was a statistically significant difference in responses to question 6 and participation in the e-learning course. P-value was 0.03815. 29 (61.7%) students, who participated in the e-learning course and 15 (37.5%) students, who did not participate in the course, responded "Yes" and "Rather yes", 17 (36.2%) students, who participated, and 25 (62.5%), who did not participate in the course, responded "Rather no" and "No".

To summarise, these statistically significant differences in the responses to question 5 and 6 are supposed to be caused by the personal experience of the students, who took part in the e-learning course and who could better judge this question, and on the other hand, by the lack of experience of those who did not take part in the course. Most students who took part in the course supported the inclusion of the e-learning course in the distance studies and thought that the studies through the e-learning method could be as effective as through the face-to-face method. In the other items (7 – 11) there were no statistically significant

differences in responses between those students who participated in the e-learning course and those who did not as p-values were higher than the significance level.

10.4.6.3 Interpretation of the open question

The last question of the questionnaire was open. It asked for any productive commentary as far as the e-learning course was concerned, with the aim of improving the course and using it for self-studies and distance studies. It offered respondents a wide freedom in their responses and became the source of new and unknown data. The analysis of the data in this question was qualitative. The combination of quantitative and qualitative methods of analysis in the questionnaire survey was used for the purpose of the methodological triangulation. It was used to minimise the bias in findings and strengthen the study. The responses were categorised (satisfaction, dissatisfaction, reasons of satisfaction and reasons of dissatisfaction) on the basis of the instruction in the questionnaire and on the basis of the students´ responses. Finally, the students´ responses were evaluated.

Of the 47 respondents who took part in the e-learning course, 44 (93.6%) expressed their views on the course. 5 (10.6%) students did not provide any comments. All of them were males, 2 (4.3%) students from the Trade and Business with Machinery field of study, 2 (4.3%) from the Economics and Management field of study, and 1 (2.1%) from other, non-specified fields of studies. As far as the year of study is concerned, 3 (6.4%) students were in the first year of studies, 1 (2.1%) student was in the third year of studies and 1 (2.1%) in the second year. The group of students who expressed their views on the e-learning course included 26 (55.3%) men and 18 (38.3%) women. 16 (34.0%) women were in their first year of studies, 1 (2.1%) in the second year of studies and once the year of study was not given. 15 (31.9%) men were in the first year of studies, 2 (4.3%) in the second year of studies and 9 (19.2%) in the third year of studies. 7 (14.9%) students were from the Economics and Management field of study, 10 (21.3%) were from the Business and Administration field of study and 10 (21.3%) were from the Trade and Business with Machinery field of study and 17 (36.2%) from other, non-specified fields of studies.

Overall satisfaction with the lessons was expressed by 23 (48.9%) respondents. Overall dissatisfaction was expressed by only 3 (6.4%) respondents. 18 (38.3%) respondents commented on the lessons somehow, either more positively or more negatively. Several

authentic examples of the submitted comments in italics are given below sequenced from positive to negative and translated into English:

- *The lessons were interesting – for the development of vocabulary and reading comprehension even better than face-to-face instruction.*
- *I liked the course very much – in the field of reading comprehension and writing it is even better than normal lessons.*
- *I liked this method of teaching, everything should remain as it is.*
- *I liked the e-learning course. I think that it was very contributional.*
- *I evaluate it positively, e-learning was effective, I could concentrate on the activities better during self-studies*
- *The lessons are efficient. I was pressed to study and prepare for the lessons.*
- *I liked the lessons and the work on computers as it is quick and convenient.*
- *I think that e-learning has a great potential.*
- *I missed communication in the lessons.*
- *This type of the lessons is not entirely effective.*
- *The e-learning method is not proper for language teaching.*

The next category that was analysed dealt with the <u>reasons for the students´satisfaction</u>. Students mentioned the improvement in vocabulary, in writing and translation, then they appreciated the recordings of specialist articles by native speakers – they found them very useful for pronunciation. Furthermore, students mentioned self-studies in connection with the flexibility of time for studies and the pace of studies. Some of them also stressed financial matter – they saw a big positive in that they did not have to buy textbooks. Some evaluated positively the elaboration of activities, particularly their understandibility and clear arrangement.

Another category concerned the <u>reasons for dissatisfaction:</u> 12 students missed conversation during lessons. They did not take into consideration that at the beginning of the lessons, they were informed that this skill would be excluded from the e-learning course. Several students expressed the requirement to a complete survey of specialist vocabulary translated into the Czech language (they were provided with the English explanation of vocabulary). Some wanted the list of words to be filled in the exercise and more offers of correct answers as fill-in-the-blank activities seemed to be difficult for them. They were forced to look up the vocabulary up themselves. Some of them required

to add more activities for vocabulary, more articles for reading, and more materials for self-studies.

10.4.7 Summary of the research

At the end of the term, the total results in the post-tests were absolutely equal, there were no statistically significant differences. The students of the experimental group were statistically significantly better only in the listening comprehension. They had the same results in the translation and writing as the control group, and very slightly worse results in the vocabulary and reading comprehension than the control group, but not statistically significant. Moreover, it was shown that the students using e-learning may achieve even better results in some skills than the students taught face-to-face, such as in the listening comprehension in this study. (The means of the results in the listening comprehension were the following: 92% of the experimental group x 86% of the control group in the post-test). There were statistically significant differences between the pre-test and the post-test within the experimental group. It may be concluded that the students improved after completing the e-learning course. In total, the mean in the pre-test was 81%, in the post-test 87%. This also proves that the students improved a lot. The students of the control group also improved their skills and vocabulary after completing the face-to-face course as there were statistically significant differences between their pre-test and post-test.

The opinions of the students as to whether or not the effectiveness of the e-learning course and the face-to-face instruction was the same were influenced by the participation in the e-learning course. The results indicate that in most cases, negative views of the overall effectiveness of the e-learning course were expressed by those students who did not take part in the e-learning course. On the other hand, as far as the positive attitude to the e-learning effectiveness is concerned, the number of students who took part in the e-learning online course prevailed. The findings in opinions on the development of single skills show the students´positive attitude towards e-learning.

The students expressed their satisfaction with the possibility to do, finish or revise activities in the Moodle LMS at home. Hot potatoes activities were appreciated a lot by the students. Besides them, the students also appreciated translations, activities for writing development and specialist articles on a given subject-matter. The lessons in an electronic form seemed to be practical for them.

10.4.8 Limitations of this study

In the real world in which classes exist, some limitations are placed on the research. In our experimental research we were limited by the fact that the groups existed prior to the research, so we could not randomise the assignment of subjects (students) to special groups for the purposes of the research. "By randomising, any effects of extraneous and subject variables occur by chance; the chance is equally distributed between both groups" (Seliger and Shohamy, 1990: 143). Our groups existed prior to the research and randomisation, which provides better control of variables which could affect validity, was used only for assigning groups to the experimental or control groups. Therefore, we tried hard to control extraneous and subject variables that could affect the validity (see 10.1.1, 10.1.2).

11 Conclusion

E-learning has been proposed by many institutions as one of the effective methods to be used in learning and teaching as it is illustrated in the background research. No research that concerns the effectiveness of ESP e-learning, particularly in comparison to the face-to-face instruction, has been conducted so far.

Focus has been placed on the implementation of content-based instruction through e-learning. This has been effectively carried out through the customisation and incorporation of the Moodle LMS into the ESP lessons. In this research study we examined whether there are any significant differences among the experimental group and the control group, and if so, what are the possible explanations and implications.

The originality value of the research into the English language teaching methodology is that the experiment on comparing the results of students studying through the method of e-learning with those being taught through the face-to-face instruction was conducted. The objective was to identify whether any statistically significant differences in their results existed in single skills, except for speaking. At the time of writing, there was no other research focused exclusively on ESP e-learning experiment that would compare the results of the control and the experimental groups, neither in the pre-research (the pilot study), nor in the research (the study proper).

Our findings are consistent with the findings of Čechová (2010), as reported in the literature review, that the ICT contributed to improving the skills of the students. In our research, the ICT influenced the experimental group and the control group in a positive way, the skills of the students improved. Čechová concentrated on the influence of ICT on the development of all skills (listening, reading, speaking, and writing). In our dissertation, on the other hand, we focused on the impact of the purely online e-learning course on the development of skills in comparison with the face-to-face instruction. We excluded speaking and added translation that can be comprehended as the fifth skill which currently is increasingly gaining importance. The experimental group improved a lot in reading and listening, a little in writing, translation and the vocabulary. The control group improved a lot also in reading and listening, a little in writing and translation and quite a lot in the vocabulary.

There is a discrepancy here with the work of Díaz and Entonado (2012), whose results showed that technology assisted learning was less effective in developing listening skills. The results of our research indicate that the students of the experimental group improved considerably, particularly in listening comprehension. The data presented above indicate that the e-learning method had a strong influence on the students´ listening skills which improved considerably. The result of the experiment could be also caused by the fact that at the beginning of the lessons, the experimental group was a bit better than the control group (not statistically significantly) and the e-learning helped them enhance their listening skills even more. In addition, the listening was practised through e-learning in every lesson by means of headphones and repeated without limit on the condition that the other activities had been fullfilled. However, in the face-to-face instructional method the listening element was carried out using a tape-recorder and the other listening activities were to be practised at home. The students of the experimental group were statistically significantly better in listening comprehension and slightly worse in the vocabulary than the control group.

The experimental group improved a lot in vocabulary in the pre-research and the e-learning method seemed to be a very good method for extending vocabulary. In the research, the control group taught through the face-to-face method improved quite a lot in the vocabulary, but there was no statistically significant difference between the groups. The reason for the improvement could be due to the help of the teacher with immediate translation or explanation in the face-to-face instruction, or a possibility to do activities at home on Moodle and their thorough practising. The results show positive and considerable influence of ICT on the development of students´ skills and vocabulary.

The research was also based on the questionnaire analysis of students´opinions on the e-learning method, its effectiveness and its inclusion into the distance studies. Similarly, Pop et al (2009) conducted their research on the computer-based course assessment questionnaire. The results indicated that even though the students´motivation had increased and they had expressed positive views on the course, they had not been prepared to be fully autonomous and study through the pure online course.

In our research most of the students who participated in the e-learning course assessed it positively and thought that it could be included in the distance studies. Even more than a half of those students who did not take part in the course (control group) thought that it

could be included in the programme for distance students. Although there were statistically significant differences in responses to questions connected with the effectiveness of the e-learning method, more than half of the students expressed the opinion that the ESP e-learning course could be as effective as the face-to-face instruction.

Importantly, as many other studies have stressed, the access to online courses may also be the only option for the students who need to work in parallel to their university studies, and are not be able to attend lectures at a given time or place, who may have suffered from some health problems, who are disabled or who live abroad for some period of time. These are the reasons why we, at our faculty, would like to offer the e-learning course of Business English for distance students and the centres of lifelong learning, and why we conducted our research supporting that possibility. The e-learning course will serve the students of all faculties and fields of studies at the Czech University of Life Sciences (CULS) Prague, including the incoming Erasmus students and academic staff. It will be an advantage for the students to have this material, which can be used for improving communication with foreign partners, extending the terminology for specialist literature studies and constantly available on the Internet. The online study support will be focused on business and economic vocabulary and will be available to all students at the most appropriate time for their studies. They can return to it, practise it and enhance it whenever they need. Language teaching will correspond to a modern way of teaching based on using new didactic procedures and technologies in the lessons. The ESP e-learning course in Moodle is very important for distance students as the Moodle LMS will help them in their self-studies and boost their confidence. Self directed learning is a key to this pedagogy, distance learning is enabled through a self-access material, and hence the students´ responsibility for their own learning is augmented.

We can update the course, change it, develop or reduce it depending on the student´s needs; this is easier than with paper publications. The ESP e-learning course can enhance and modernise ESP teaching/learning by developing new study habits of students through promoting self-directed, autonomous learning, active learning, out-of-classroom learning etc. Learners´ autonomy is enhanced because it requires students to decide what they will do and how they will achieve it.

Recommendation for practice:

The research revealed that no statistically significant differences had been found in the results of students studying through the method of e-learning when compared with those taught through the method of face-to-face instruction. The findings suggest that the practical outcome of this dissertation, i.e., the e-learning course (pure online course), can be offered to distance students, to students in lifelong learning centres outside Prague and to students with specific needs. We would like Business English to be a compulsory subject in the Bachelor studies at the Faculty of Economics and Management and our findings could support such a vision. Moreover, the research confirmed that the e-learning course could also be used with the full-time students as a support material for the face-to-face instruction or as a full-time e-learning course in the case of students´ long-term absence as the results of the experiment showed that the students had improved their skills due to their participation in the e-learning course throughout the term. This was proved by finding statistically significant differences in listening comprehension, specialist vocabulary, in reading comprehension, in translation and in writing in the results of the students learning through the e-learning method (= purely online course) between their pre-test and post-test.

The practical recommendations for the e-learning course itself based on questionnaire survey findings are as follows:

- ❖ Specialist vocabulary to be translated into the Czech language (not only the explanation in English)
- ❖ Provision of the list of words to be used during the gap-filling exercises
- ❖ Extension of exercises for vocabulary
- ❖ Extension of specialist articles for self-studies

Recommendation for future research:

E-learning has undergone great development in recent years and it is now considered to be a serious teaching method used in a number of educational institutions and companies. In the current technology-driven environment, demand is high for new tools and learner-centered learning approaches. The utilisation of computers will influence the way how teachers teach and students learn, and it will be up to the teachers to make use of the Internet in ways that match the pedagogical goals.

According to Dudeney and Hockly (2007), in the future, more online training is expected - particularly the combination of virtual learning environments (VLEs) with social tools. This means that more static material in VLE will be complemented by social networking sites (MySpace) and by synchronous tools, such as voice chat via Skype, ICQ etc. Social sites seem to encourage a more eclectic approach to teaching because consumers become producers at the same time. It will promote greater personalisation of the teaching and learning processes. Therefore, the recommendation for future research is seen in the focus on interpersonal communication of students, oral and written, through emails, forums, chats, speaking through Skype and ICQ as these will support socialising. However, it is a great challenge for the teacher assigned with teaching load or overload. It is associated with the willingness of teachers to spend more time in front of their computers, in view of the increasing number of students from all forms of studies, particularly distance students (see population), and as the online communication can be very time demanding. We agree with Černá (2005: 72) who mentions that "recognising online work as a regular part of the teaching load definitely remains an issue", and that there is some evidence that online courses can be more work demanding for tutors than face-to-face courses.

Foreign language software needs to be developed beyond the typical drill-and-practice stage to fostering more communication, socialisation and conveying messages. From the technical point of e-learning, it is necessary to improve and update learning management systems with programmes which enable access to students with specific needs, with impairments such as movement difficulties or being confined to their home, with impaired hearing and seeing etc. Therefore, such programmes which magnify text on the screen, convert text into speech etc. are important for students with impairments which can make attending classes difficult. Opportunities for further research remain open. More research is necessary to be conducted in the less explored skills such as speaking and also in the culture. It would be interesting and also significant to find out whether speaking through e-learning can be as effective as through the face-to-face instruction and how e-learning can influence the social interaction and communication of students, particularly distance students and those with specific needs.

The research could be conducted in other foreign languages and other levels of the CEFR. ESP e-learning can be used to provide innovative educational opportunities to fit the particular needs of students. Thus, we believe, there is also a social and ethical dimension

to offering such courses, and through this, a possibility for participation and inclusion for those who would otherwise miss it. A Chinese proverb says: "Teachers open the door, but you must enter by yourself." "Our task is to encourage students. But it is not only the new business vocabulary a good language course should give them. It is essential to consider the fact that the immediacy of the information and news reaching our students (through this new language) gives them an opportunity to be informed of and shape their opinion on important topics relating to our society" (Mullamaa, 2010: 537).

The e-learning course is an opportunity for distance learning, it increases the quality of education, and goes beyond traditional ways of learning. There is huge potential to incorporate e-learning and web resources into distance courses.

E-learning is constantly and increasingly a developing method of learning with the pre-supposition of further development in pace with the advances in ICT. The inclusion of ICT into the lessons should not necessarily mean the usage of the most modern ICT but the usage of such a technology that helps both teachers and students the most, during the lessons and self-studies. The success of studies is not guaranteed by the best LMS but it also depends on the attitude of students to education and on the relationship between teachers and students as teachers should know their students and their needs.

With the optimum form of the e-learning course, we can assume that the efficiency of work in the LMS environment will increase and the advantages of e-learning will dominate. The emergence of e-learning courses goes hand in hand with developments in ICT. The e-learning course proved to be a new alternative of education, serving to enrich the educational process. We believe that with the expansion of technology, this type of instruction will be used more widely in language teaching in the future, particularly for distance students.

The knowledge acquired by teachers who use online and face-to-face methods can be of great value in improving both types of teaching. It is the reason why researchers nowadays study issues related to these teaching methods.

We have remained positive about the Moodle LMS as we have received positive results confirming our hypotheses and also positive evaluation from students (see questionnaires results), and also our own reflection has been positive. We do not want to doubt the role of a teacher in the lessons. It is not a question of whether the teacher should be replaced but what the efficiency of e-learning is. The objective of the dissertation was to find out

whether the e-learning method is equally effective as the face-to-face instruction. The ESP e-learning course is considered to be successful and promising. Not only did it prove highly motivating, but it also led to positive results concerning both the course learning objective and the hypotheses.

The e-learning method was evaluated through this experimental research, and its effectiveness was confirmed. Thus, we have met the requirement of the Ministry of Education, Youth and Sports of the CR expressed in the document The Action Plan "School for 21st century" which recommended extraordinary attention to be paid to the evaluation of ICT application into teaching/learning, i.e., to the feedback (see 1.1).

The contribution to the methodology of foreign language teaching/learning can be viewed from the following perspectives:

The research revealed no statistically significant differences between the results of students studying through the method of e-learning with those taught through the face-to-face instruction. This finding is considered an important contribution to the research in the field of ESP e-learning and an important pedagogical success as statistically significant differences between the results of the students of both groups, namely better results of the students taught through the face-to-face method of instruction would have meant that the method of e-learning was not effective, and it would not be beneficial to continue with this method. However, the non-existence of statistically significant differences in the research confirms the functionality and effectiveness of e-learning, and justifies the continuation of this method of teaching/learning and work on its improvement. It also indicates that the e-learning course can be offered to distance students, to lifelong learning students, to students with specific needs and to full-time students in case of a long-term absence. The differences between the observed skills and the vocabulary at the beginning and at the end of the term within individual groups were statistically significant. This finding confirms that the students in both groups improved their skills and vocabulary.

The findings from the students´ questionnaires were also very important as they expressed their views on the effectiveness of the e-learning course and its inclusion into distance studies. Most of the students who participated in the e-learning course assessed it positively and thought that it could be included in the distance studies programmes.

In this dissertation, knowledge, information and ideas on ESP, which have been scattered in various journals and conference proceedings so far, have been gathered together. The contribution of this dissertation may be seen in the development, classification, methodology and main definitions of ESP and e-learning, particularly our own determination of ESP e-learning. In our opinion, ESP e-learning covers the following aspects: ESP that is viewed in complexity as teaching /learning/using the English language based on the content that is not contextualised and that is related to subject specialism and learner's needs, then e-learning as the online support of an educational process and the method through which the course is implemented. Under the content, the knowledge of grammar, terminology and of the bases and definitions of a subject matter is comprehended.

We also hoped to contribute to the methodology of ESP e-learning through the description of how skills and vocabulary in ESP could be practised and developed through the e-learning method. A theoretical survey of ESP e-learning activities that can be used for skills and vocabulary development is provided. The survey is based on literature sources and on our own experience. Morover, the research methodology in ESP e-learning can serve students and teachers of languages at pedagogical and philosopical faculties and other teachers as a practical instruction for conducting their language and pedagogical research.

The practical outcome designed for the purposes of empirical research is the e-learning course itself, the structure and the content of which can be an inspiration for other practitioners. The ESP e-learning course proved to be a new alternative method of education which serves to enriching the educational process. We believe that with the expansion of technology this type of instruction will be widely used in language teaching in the future, particularly for distance students, for lifelong learning students, and for students with specific needs as well. The research was conducted under standard school conditions and thus, the design of the course can be applied in the courses of other foreign languages and at other language levels within higher education institutions development.

12 Resumé – Czech

Téma této dizertační práce odráží skutečné potřeby a priority v rámci výuky cizích jazyků na Provozně ekonomické fakultě České zemědělské univerzity v Praze. Jednou z priorit v oblasti vzdělávání je snižování počtu kontaktních hodin a přímé výuky. Toto je spojeno s využitím moderních informačních a komunikačních technologií a e-learningových kurzů pro denní formu studia, pro distanční studium a pro centra celoživotního vzdělávání mimo Prahu.

Výzkum je realizován v rámci ČZU v Praze v souladu s jejím dlouhodobým cílem vzdělávacích, vědeckých, výzkumných, vývojových, inovačních a dalších tvůrčích činností na období 2011 - 2015, v souladu s jazykovou politikou Evropské unie, s národní politikou jazykového vzdělávání a s dlouhodobými cíli Ministerstva školství, mládeže a tělovýchovy České republiky. Pro účely výzkumu byl vytvořen e-learningový kurz v rámci grantu Fondu rozvoje vysokých škol, 2011, č. F5 - 1836.

Hlavním cílem dizertační práce je zjistit, zda je metoda e-learningu stejně efektivní jako tradiční výuka face-to-face, tj. potvrdit nulovou hypotézu, že neexistují statisticky významné rozdíly ve výsledcích studentů, kteří absolvovali e-learningový kurz, a těmi, kteří absolvovali kurz face-to-face. Zároveň byl zkoumán vliv informačních technologií na výsledky studentů po absolvování kurzu v rámci jednotlivých skupin. Vedlejším cílem bylo zjistit názory studentů na e-learning v závislosti na četnosti jejich odpovědí a na jejich kvalitativních znacích. Praktickým výstupem je e-learningový kurz Obchodní angličtiny v systému řízeného vzdělávání Moodle.

Teoretická východiska

První kapitola se týká jazykové politiky v evropském a národním kontextu ve vztahu k výuce odborného jazyka a se zřetelem na využití e-learningu. Odráží současné potřeby výuky anglického jazyka v České republice po vstupu do Evropské unie spolu se specifikací strategických cílů, jako je např. zlepšení kvality a efektivity vzdělávacích systémů a programů v Evropské unii.

Druhá kapitola se zabývá výukou odbornému anglickému jazyku (ESP), jeho vývojem, pojetím, klasifikací, jeho vztahem k integraci obsahového a jazykového vzdělávání (CLIL), autorčiným vymezením výuky odborné angličtiny a pozicí Obchodní angličtiny v rámci ESP v souvislosti s masivní expanzí mezinárodního obchodu v posledních letech

(viz 2.2). Definice ESP jsou četné, tvoří přehled toho, co je zahrnováno termínem ESP. Jedním z klíčových prvků v řadě definic ESP se jeví zřetel na potřeby studentů (Smoak, 2003; Dudley-Evans a St John, 2005; Hutchinson a Waters, 1987), někteří autoři chápou ESP zároveň jako určitý přístup k výuce odbornému anglickému jazyku (Hutchinson a Waters, 1987; Mackay a Mountford, 1978) nebo jako určitý aspekt výuky anglickému jazyku (Kennedy a Bolitho, 1984). Dle našeho názoru lze ESP chápat komplexně jakožto výuku/učení se anglickému jazyku na základě odborného obsahu, který nemusí být kontextualizován, jako je tomu u CLIL, ale který se vztahuje k předmětu specializace a k potřebám studentů. ESP lze také dle našeho názoru definovat jakožto první fázi CLIL. Odborným obsahem chápeme nejen terminologii, ale také základní ekonomické a obchodních pojmy a definice. Výuka odborné angličtiny zahrnuje dvojí účel (Strother, 2005), studenti se seznámí s relevantním odborným obsahem, a zároveň si zlepší své jazykové dovednosti. Jejich úroveň vnitřní motivace je vysoká, neboť studují předměty, které je zajímají. Metodika výuky odborné angličtiny se radikálně neliší od všeobecné angličtiny. Existuje však jeden zásadní rozdíl, který ovlivňuje metodiku: studenti mají odborné znalosti, které učitelé ESP obvykle nemají a ani nemusí mít (Hutchinson a Waters, 1987; Kennedy a Bolitho, 1984). Učitelé ESP nejsou v pozici primárního nositele znalostí. Dudley-Evans a St John (2005) konstatují, že výuka ESP by měla být založena také na metodice oborů a profesí, kterým slouží.

Třetí kapitola je zaměřena na vývoj a pojetí e-learningu. E-learning je nejčastěji definován jako učení, popř. vzdělávání, které je umožňované a podporované užitím informačních a komunikačních technologií (Fedyunina, 2006; Barešová, 2003; Dudeney a Hockly, 2007; Průcha, Walterová a Mareš, 2001; Nevima 2012; Frydrychová Klímová, 2006). E-learning stojí v současné době v centru pozornosti mnoha vzdělávacích institucí, je uznáván jako tzv. strategické aktivum (Garrison a Anderson, 2003), a tudíž prioritou mnoha vzdělávacích institucí je transformace výuky pomocí e-learningu. Podpora nových technologií ve výuce se strategickou integraci e -learningu spolu s kontinuálním celoživotním vzděláváním umožňuje vzdělávacím institucím zajistit si vedoucí postavení na trhu vzdělávání. Dále je v této kapitole zmíněna specifická e-learningová metodika výuky odborné angličtiny zahrnující učení se jazyku a učení se odbornému předmětu pomocí e-learningu. E-learningové kurzy odborné angličtiny (ESP e-learning) jsou vytvářeny v globalizovaném světě jakožto reakce na trh práce a potřeby studentů

a vzdělávacích institucí. Jsou to buď čistě onlinové kurzy, nebo tzv. blended kurzy s podporou e-learningu. V našem pojetí zahrnuje ESP e-learning ESP, které je chápáno ve své komplexnosti jako výuka/učení se anglickému jazyku v závislosti na odborném obsahu, který nemusí být kontextualizován a který se vztahuje k předmětu specializace a potřebám studentů, a dále e-learning, který je chápán jako online podpora vzdělávacího procesu a metoda, pomocí níž je výuka odborné angličtiny (ESP) realizována.

ESP e-learning vyžaduje speciální přípravu učitelů jazyků, a tudíž i specifickou metodiku. Je žádoucí, aby měl učitel určité znalosti odborného předmětu, je však více jazykovým poradcem. Jeho další role jsou dány metodou e-learningu (tutor, technolog, online poradce atd.) (Černá, 2005; Vančová, 2007). Většina autorů se shoduje na tom, že velkou výhodou e-learningu je ta skutečnost, že umožňuje studentům přizpůsobit výuku svým individuálním potřebám a časovým požadavkům. Studenti jsou si vědomi svých vlastních cílů, líbí se jim možnost pracovat nezávisle a vlastním tempem (Vančová, 2007; Dudeney a Hockly, 2007; Galavis, 1998). Některé dovednosti, jako je mluvený projev, je však těžší praktikovat online a někteří studenti nejsou schopni učit se individuálně, protože jsou silně závislí na učiteli, který jim poskytuje povzbuzení a bezprostřední zpětnou vazbu (Černá, 2005). Další problémy, které mohou při e-learningu vzniknout, jsou technické problémy; e-learning není také vhodný pro určité typy kurzů, jako jsou ty, které zahrnují experimenty a demonstrace (Dudeney a Hockly, 2007; Růžičková 2009; Vančová 2007).

Čtvrtá kapitola se týká ESP e-learningu a souvisejících jazykových teorií a teorií učení, které poskytují teoretické základy pro metodiku výuky. Obě teorie jsou teoretickým základem designu kurzu. ESP E-learningový kurz musí být založen na pevných základech lingvistické teorie, zejména ve vztahu k odborné angličtině, a na základech teorie učení, vztahující se k online výuce nebo k e-learningu (Strother, 2005). Náš jazykový kurz je založen na lingvistické teorii registrů a na funkčním popisu jazyka (Hutchinson and Waters, 1987; Bell, 1981). Teorie nejsou výlučné, ale vzájemně se doplňují. Příslušnými teoriemi učení, které poskytují základy pro metodiku výuky odborné angličtiny pomocí e-learningu jsou behaviorismus a konstruktivismus (Nesi, 2011; Blázques, 2007).

Pátá kapitola je příspěvkem k metodologii ESP teoretickým popisem rozvoje jazykových dovedností a slovní zásoby a uvedením různých možností, jak je rozvíjet prakticky prostřednictvím e-learningových aktivit (Dudley-Evans a St John, 1998; Harmer 2005). Jedná se o rozvoj slovní zásoby, čtení, poslechu, psaného projevu, mluveného projevu

a překladu (Duff, 1992; Janata, 1999) jakožto páté dovednosti a zprostředkující aktivitě (CEFR, n.d.: 57). Rozvoj slovní zásoby a jednotlivých jazykových dovedností by neměl být realizován odděleně, ale integrovaným způsobem. Proto byl rozvoj dovedností integrován do jednotlivých modulů. Použití jedné dovednosti obecně zahrnuje alespoň jednu z dalších dovedností. Např. poslech výslovnosti slovní zásoby ji pomáhá lépe ukládat do paměti a potom si ji následně vybavit. Podobně čtení a poslech textu zároveň pomáhá zlepšit jeho porozumění a výslovnost. S ohledem na tuto skutečnost odborné pojmy a odborné texty v každém modulu byly nahrány rodilým mluvčím.

Tématem šesté kapitoly je přehled literatury zabývající se výzkumem v oblasti ESP a e-learningu. Analýza sekundární literatury odhalila absenci vědeckého výzkumu v oblasti našeho experimentálního zkoumání. Toto zjištění nás vedlo k závěru, že je třeba studie, která poskytne nové a signifikantní informace na poli ESP e-learningu, ke zdůvodnění našeho výzkumu a k realizaci naší vlastní výzkumné studie. Práce je první svého druhu v českém kontextu a pravděpodobně i v zahraničí.

Empirická část začíná v sedmé kapitole, v níž je představeno jazykové vzdělávání na PEF ČZU v Praze a také e-learningový kurz společně s technickým řešením v rámci systému řízeného vzdělávání Moodle.

Metodika výzkumu je uvedena v osmé kapitole. Hlavním cílem této disertační práce bylo zjistit pomocí experimentu efektivitu ESP e-learningu ve srovnání s výukou face-to-face, tj. potvrdit nulovou hypotézu, že neexistují statisticky významné rozdíly ve výsledcích studentů, kteří absolvovali e-learningový kurz (experimentální skupina) a těmi, kteří absolvovali kurz face-to-face (kontrolní skupina), a tedy že je možno e-learningový kurz využít i pro distanční studium, celoživotní vzdělávání a pro studenty se specifickými potřebami. Zároveň jsme zkoumali, zda existují statisticky významné rozdíly ve výsledcích studentů na začátku kurzu a po ukončení kurzu v rámci jednotlivých skupin, tj. zda si studenti zlepšili své jazykové dovednosti a znalosti slovní zásoby po absolvování kurzu. Vedlejším cílem bylo zjistit názory studentů na efektivitu e-learningu v závislosti na četnosti jejich odpovědí a na jejich kvalitativních znacích. Jedná se o experimentální výzkum realizovaný za standardních školních podmínek a za situace, která existuje v reálném světě. Experimentální výzkum je založený převážně na kvantitativních, částečně kvalitativních metodách sběru dat, mezi něž patří pre-testy, post-testy a dotazníkové šetření. Statistické výsledky jsou doplněny a podpořeny popisnou statistikou (průměry

testů, směrodatná odchylka). Na základě podrobného studia odborné literatury (Seliger a Shohamy, 1990; Pelikán, 2007; Gavora, 2000; Travers, 1969; Cohen, 2007), která se týká jazykového a pedagogického výzkumu, byla stanovena metodika výzkumu a byly formulovány výzkumné otázky a hypotézy, které jsou hlavními komponenty experimentálního výzkumu spolu s výzkumnými nástroji (viz 8.3).

Byly formulovány následující výzkumné otázky: Je metoda e-learningu stejně efektivní jako výuka face-to-face? Zlepšili se studenti statisticky významně v jazykových dovednostech a slovní zásobě po absolvování e-learningového kurzu a po absolvování tradiční výuky face-to-face? Jaký je názor studentů na e-learning a na rozvoj jazykových dovedností a slovní zásoby prostřednictvím e-learningu?

Hypotézy:

1. Neexistují statisticky významné rozdíly mezi výsledky univerzitních studentů, kteří se učí odbornou ekonomickou a obchodní angličtinu pomocí e-learningu (čistě online kurz) se zaměřením na poslech s porozuměním, odbornou slovní zásobu, čtení s porozuměním, překlad a psaní, a těmi, kteří studují prostřednictvím tradiční metody face-to-face.

2. Existují statisticky významné rozdíly v poslechu s porozuměním, v porozumění čtenému, v písemném projevu, v překladu a v odborné slovní zásobě ve výsledcích univerzitních   studentů, kteří se učí pomocí e-learningu mezi jejich pre-testy a post-testy.

3. Existují statisticky významné rozdíly v poslechu s porozuměním, v porozumění čtenému, v písemném projevu, v překladu a v odborné slovní zásobě ve výsledcích univerzitních   studentů, kteří se učí metodou face-to-face mezi jejich pre-testy a post-testy.

Základní soubor je reprezentován studenty ČZU v rámci bakalářského studia, pro než je angličtina povinná a kteří se zapsali do kurzů úrovně B1 dle Společného evropského referenčního rámce pro jazyky. V našem výzkumu je e-learningová metoda výuky v Moodlu nezávislou proměnnou, závislou proměnnou jsou pre-testy a post-testy jakožto hlavní výzkumné nástroje (metody sběru dat). Doplňkovým výzkumným nástrojem jsou dotazníky, s jejichž pomocí jsme se snažili zjistit názor studentů na e-learning a na rozvoj jazykových dovedností a slovní zásoby pomocí e-learningu a na vhodnost začlenění pro distanční studium. Pro předběžné testování výzkumných nástrojů a prověření e-learningové metody před vlastním výzkumem byl realizován předběžný výzkum v rámci pilotní studie v zimním semestru akademického roku 2011/2012. Z výsledků této fáze vyplynulo, jaké změny je nutno provést, aby výzkumné nástroje mohly být s důvěrou použity ve vlastním

výzkumu a poskytly spolehlivá data. V předvýzkumu jsme získali informaci o tom, zda jsou položky příliš snadné nebo příliš obtížné a zda jsou položky dobře formulovány a pro studenty srozumitelné. Na základě výsledků z pilotní studie jsme se rozhodli upravit kurz více pro potřeby studentů. Byly přidány některé aktivity požadované v dotaznících, zejména poslech a psaní, a byla zkontrolována doba potřebná pro administraci testů. Struktura dotazníku pro konečnou fázi výzkumu byla také mírně upravena. Abychom zjistili, zda jsou testy konzistentní, spolehlivé a přesné a zda mohou být použity ve vlastní výzkumné studii, bylo důležité vypočítat Cronbachův koeficient alfa (Seliger a Shohamy, 1990). Statistický výpočet prokázal, že pre-testy jsou spolehlivé, ale post-testy jakožto výzkumné nástroje byly nespolehlivé, neboť Cronbachův koeficient alfa byl nižší než 0,7. To znamená, že homogenita položek nebyla vysoká a výsledky testů by mohly být ovlivněny náhodou. To byl důvod, proč ve vlastní výzkumné studii musela být zvýšena reliabilita post-testů. Tohoto bylo dosaženo u položky čtení změnou jednoho cvičení s otázkami na porozumění na multiple-choice, čímž se stalo známkování objektivnějším. Reliabilita a obsahová validita testů byla posílena přidáním 5 položek k subtestu slovní zásoby a 5 položek k poslechu. Pilotní výzkum prokázal, že e-learning je velmi dobrá metoda výuky pro rozšíření slovní zásoby studentů. Na začátku akademického roku, byla experimentální skupina o něco lepší než kontrolní skupina, ale z hlediska statistické významnosti neexistovaly statisticky významné rozdíly mezi těmito dvěma skupinami, s výjimkou slovní zásoby (experimentální skupina byla lepší). Na konci semestru, byly výsledky víceméně stejné, neexistovaly žádné statisticky významné rozdíly mezi skupinami. Celkově se studenti experimentální skupiny výrazně zlepšili (viz 9.3).

Desátá kapitola je věnována vlastní výzkumné studii, výzkumným nástrojům, kontrole validity a reliability testů. Jsou zde prezentovány a interpretovány výsledky pre-testů, post-testů a dotazníků. Výzkum byl realizovaný v zimním semestru akademického roku 2012/2013. V rámci výzkumu je e-learning nezávislá proměnná a pre-testy a post-testy jsou závislé proměnné. Existují však i jiné proměnné, jejichž účinky musí být kontrolovány. Na základě studia odborné literatury jsme se snažili již při plánování výzkumu kontrolovat a minimalizovat vnější proměnné, které mohou mít vliv na validitu výzkumu.

Základní soubor tvořilo 3082 studentů všech forem studia zapsaných do kurzů angličtiny B1 v zimním semestru akademického roku 2012/2013. Výzkumný vzorek 107 studentů byl reprezentován těmi studenty prezenčního studia úrovně B1, kteří si zapsali předmět Obchodní angličtina. Jednalo se o tzv. přirozené skupiny, které existovaly před výzkumem, nebylo možné přiřadit studenty do skupin randomizací (Seliger a Shohamy, 1990). Studenti se zapsali do výuky individuálně na základě svých odborných rozvrhů a nebylo možné ovlivnit, kolik z nich se zapíše na Obchodní angličtinu a na který den. Na počátku výzkumu bylo v experimentální skupině 53 studentů a 54 studentů v kontrolní skupině. Na konci zimního semestru zůstalo v experimentální skupině 49 studentů a v kontrolní skupině 45 studentů. Na začátku zimního semestru akademického roku 2012/2013 jsme zrealizovali pre-testy za účelem zjištění úrovně vstupních jazykových dovedností (poslech, čtení, psaní, překlad) a slovní zásoby studentů obou skupin. Po vyhodnocení pre-testů byly vypočteny směrodatné odchylky (vyjadřují rozptyl bodů kolem průměru) pro obě skupiny, které byly téměř stejné (9%, 10%). Podobně i v post-testech, které byly realizovány po absolvování kurzu Obchodní angličtiny, byly směrodatné odchylky téměř stejné (6%, 7%). Výsledky pre-testů potvrdily, že variabilita v kontrolní skupině je téměř stejná jako u experimentální skupiny a že obě skupiny jsou homogenní (Seliger and Shohamy, 1990). Byl podpořen základní předpoklad pro výzkum, že obě skupiny jsou srovnatelné, a tudíž reprezentativními vzorky ze stejného souboru, na který se bude výzkum aplikovat. Výzkum lze zobecnit, a tudíž platí i mimo bezprostřední výzkumné prostředí. To také podporuje validitu výzkumu. Rozdíly v testech, pokud existují, jsou v důsledku různých metod výuky, nikoliv z důvodu jiných neidentifikovatelných proměnných (Seliger a Shohamy, 1990; Pelikán, 2007)**.** Oba testy byly hodnoceny v procentech. Použili jsme části stávajících standardizovaných testů jako pre-testy, kromě překladu. Post-testy skládající se z odborné terminologie byly vytvořeny na základě naší zkušenosti a také ve formě standardizovaných testů. Všechny testy tak vytvořené byly konzultovány s dalšími dvěma učiteli Obchodní angličtiny. Aby byla interpretace výsledků testů validní, výsledky musí být reliabilní. Statistický výpočet prokázal, že výzkumné nástroje jsou konzistentní, tj. položky v jednotlivých testech jsou homogenní. Hodnota Cronbachova koeficientu alfa překročila hodnotu 0, 7 ve všech měřených případech (ve všech pre-testech a post-testech a u obou skupin). Homogenita položek byla vysoká, reliabilita výzkumných nástrojů byla také vysoká, neboť Cronbachův koeficient alfa s hodnotou od 0.7 do 1.00 je považován za

akceptovatelný, tudíž data nebyla ovlivněna náhodou a jsou reliabilní (Manual for Language Test Development and Examining, 2011: 17; Seliger a Shohamy 1990: 187; Brown, 1998). Reliabilita je v úzkém vztahu k validitě testu. Aby byl test validní, musí mít vysokou míru reliability. Na základě statistického měření a úsilí na začátku výzkumu minimalizovat narušení validity lze konstatovat, že testy jsou reliabilní a taktéž validní.

Sekundárním cílem výzkumu bylo dotazníkové šetření (viz 10.3.2). Jeho cílem bylo zjistit názor studentů na vliv e-learningu na jejich jazykové dovednosti a slovní zásobu ve srovnání s výukou face-to-face a na implementaci e- learningového kurzu pro distanční studium v závislosti na četnosti jejich odpovědí a na jejich kvalitativních znacích (rok studia, obor studia, pohlaví atd.). Dotazníkové šetření bylo realizováno poslední vyučovací hodinu kurzu v zimním semestru 2012/2013. Dotazníky byly distribuovány v českém jazyce, aby byly otázky správně pochopeny. Tímto způsobem byla posílena validita zjištění. Použili jsme nestandardizovaný dotazník, který byl složen z 11 uzavřených otázek (Likertovy škály) s vysokou mírou explicitnosti (Gavora, 2000) a z jedné otevřené otázky, která byla určena pro respondenty k vyhodnocení kurzu, pro připomínky a také pro doporučení studentů pro další aktivity v Moodlu, neboť Moodle lze do budoucna libovolně aktualizovat. Anonymními dotazníky v souladu s etickými aspekty při sběru dat byla zajištěna důvěrnost osobních údajů. Anonymita a vysoká míra návratnosti (93%) zvýšily validitu zjištění, reliabilita nástroje byla podpořena začleněním více škál, čímž posuzovací nástroj získal větší vnitřní konzistenci. Předpokládá se, že by dotazníky měly přinést pravdivé a přesné odpovědi.

Výsledky a diskuse

Výsledky pre-testů a post-testů byly zpracovány do tabulek a vyhodnoceny pomocí statistických metod na katedře statistiky ČZU. Pro testování statistických hypotéz byly vybrány vzhledem k charakteru vstupních dat neparametrické testy, Mann-Whitneyův a Wilcoxonův párový test. V případě závislých vzorků (pre-testy a post-testy v rámci stejné skupiny) byl použit Wilcoxonův párový test. Naopak Mann-Whitneyův test je primárně určen k testování nezávislých vzorků (pre-testy a post-testy u různých skupin). Pro statistický výpočet byl využit statistický program Statistica 10. Z každé tabulky s výsledky testů byl vypočítán statisticky významný rozdíl mezi výsledky v pre-testech a post-testech u obou skupin, ale i v rámci jednotlivých skupin. Pokud je p-hodnota nižší než hladina významnosti 0,05, rozdíl je statisticky významný (Hindls et al, 2007; Svatošová a Kába,

2012). Pro elementární popis výsledků byly použity absolutní a relativní četnosti a základní popisné charakteristiky, jako je průměr a směrodatná odchylka, neboť i na nich jsou založeny komplexní analýzy dat experimentálního výzkumu.

Porovnání výsledků v pre-testech mezi kontrolní a experimentální skupinou (viz 10.4.1)

V pre-testech neexistovaly statisticky významné rozdíly v jednotlivých jazykových dovednostech a slovní zásobě mezi skupinami. Toto zjištění je důležité, neboť potvrzuje, že jazykové dovednosti a znalosti slovní zásoby byly v obou skupinách na začátku kurzu téměř stejné. Studenti byli homogenní, pokud jde o dovednosti a slovní zásobu. Tyto statistické výsledky byly podpořeny a doplněny analýzou frekvencí procentuálního rozsahu v obou skupinách. Cílem této analýzy bylo zjistit, jak často se vyskytuje určitý bodový rozsah ve výsledcích experimentální a kontrolní skupiny a na základě tohoto zjištění vyhodnotit, jak a zda se studenti zlepšili. Seskupili jsme procentuální výsledky testů do intervalů po pěti, neboť procentuální rozsah byl příliš velký (rozmezí 0 – 100) a frekvence intervalů takto umožnila lepší posouzení výkonu studentů v testech. Zjištění frekvencí intervalů s procentuálními výsledky potvrdilo statistický výpočet, že na začátku akademického roku 2012/2013 neexistovaly žádné statisticky významné rozdíly mezi skupinami. Toto je významné zjištění také pro realizaci post-testů, neboť bylo potvrzeno, že skupiny byly na začátku semestru homogenní.

Porovnání výsledků v post-testech mezi kontrolní a experimentální skupinou (viz 10.4.2)

Výzkum byl zaměřen na zjištění vlivu e-learningu na výsledky žáků po absolvování kurzu, tj. zda existovaly statisticky významné rozdíly v jazykových dovednostech a ve slovní zásobě studentů mezi oběma skupinami na konci ESP e-learningového kurzu. Analýza prokázala, že metoda e-learningu je stejně efektivní jako metoda face-to-face, a tudíž že je možno využívat e-learningový kurz pro dálkové studenty, pro centra celoživotního vzdělávání a pro studenty se specifickými potřebami. Hypotéza 1, že neexistují žádné statisticky významné rozdíly mezi skupinami, byla prokázána. Všechny sub-hypotézy byly prokázány s výjimkou sub-hypotézy 1.1, která byla vyvrácena. Existovaly statisticky významné rozdíly v poslechu s porozuměním mezi skupinami. Studenti experimentální skupiny byli statisticky významně lepší pouze v poslechu s porozuměním. Měli stejné

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výsledky v překladu a psaní a o trochu horší výsledky ve slovní zásobě a čtení s porozuměním než kontrolní skupina, ale ne statisticky významně.

Z výsledků analýzy lze usuzovat, že metoda e-learningu měla silný vliv na poslechové dovednosti studentů, které se značně zlepšily. Výsledek experimentu by mohl být ovlivněn tím, že na začátku výuky byla experimentální skupina o něco lepší než kontrolní skupina, ne však statisticky významně, a e-learning pomohl zlepšit poslechové dovednosti studentů experimentální skupiny ještě více.

Interpretace výsledků v rámci experimentální skupiny (viz 10.4.3)

Cílem analýzy bylo určit, zda existují statisticky významné rozdíly v jednotlivých jazykových dovednostech a slovní zásobě u experimentální skupiny mezi pre-testem a post-testem, tj. zda se studenti zlepšili nebo zhoršili po dokončení ESP e-learningového kurzu. Výsledky ukázaly, že existuje statisticky významný rozdíl mezi celkovými výsledky v pre-testu a post-testu. Po absolvování e-learningového kurzu se studenti velmi výrazně zlepšili. Rozdíl mezi pre-testem a post-testem byl statisticky významný, hypotéza 2 a všechny sub-hypotézy byly prokázány. Tyto statistické výsledky byly podpořeny a doplněny analýzou frekvencí intervalů s procentuálními výsledky experimentální skupiny a taktéž průměrné výsledky pre-testu (81%) a post-testu (87%) dokazují velké zlepšení studentů po absolvování kurzu.

Interpretace výsledků v rámci kontrolní skupiny (viz 10.4.4)

Cílem analýzy dat bylo zjistit, zda existují statisticky významné rozdíly v jednotlivých jazykových dovednostech a slovní zásobě kontrolní skupiny mezi pre-testem a post-testem a zda se studenti zlepšili nebo zhoršili po absolvování kurzu face-to-face. Rozdíl mezi pre-testem a post-testem byl statisticky významný, hypotéza 3 a všechny sub-hypotézy byly prokázány. Studenti se hodně zlepšili v jazykových dovednostech a znalosti slovní zásoby. Stejně jako u experimentální skupiny byly i u kontrolní skupiny tyto statistické výsledky podpořeny a doplněny analýzou frekvencí intervalů s procentuálními výsledky a taktéž průměrné výsledky pre-testu (79%) a post-testu (87%) dokazují velké zlepšení studentů po absolvování kurzu.

Shrnutí: Studenti si v obou skupinách zlepšili jazykové dovednosti a znalosti slovní zásoby. Experimentální skupina se hodně zlepšila ve čtení a poslechu, trochu v psaní, překladu a slovní zásobě. Kontrolní skupina se také hodně zlepšila ve čtení a poslechu, trochu v psaní a překladu a poměrně hodně ve slovní zásobě, více než experimentální

skupina. Důvodem by mohla být okamžitá zpětná vazba učitele ohledně překladu neznámého termínu, nebo vysvětlení termínu, popř. možnost studentů pracovat doma v Moodlu a upevňovat si cvičení a slovní zásobu z výuky.

Interpretace výsledků dotazníkového šetření (viz 10.4.6)

Analýza dat je založena na statistických výpočtech. Studentům obou skupin byly rozdány dotazníky, v nichž vyjádřili své stanovisko k vhodnosti začlenění e-learningu do výuky Obchodní angličtiny pro distanční studium a na efektivitu e-learningu. Poslední hodinu zimního semestru 2012/2013 bylo mezi studenty distribuováno 94 dotazníků v papírové podobě. Návratnost byla 93%. U sedmi dotazníků studenti nereagovali na některé otázky, a proto byly tyto dotazníky z analýzy vyloučeny. Získaná data byla zpracována kvantitativně, poslední otevřená otázka kvalitativně.

Výsledky ukázaly, že většina studentů, kteří se zúčastnili e-learningového kurzu, podpořila začlenění e-learningového kurzu do distančního studia a vyjádřila názor, že studium prostřednictvím metody e-learningu může být stejně efektivní jako prostřednictvím metody face-to-face. Ti studenti, kteří vyjádřili svůj negativní názor na efektivitu, se povětšinou e-learningového kurzu neúčastnili. Naopak pozitivní postoj k efektivitě e-learningu zaujali převážně studenti, kteří se zúčastnili e-learningového online kurzu. Názory na rozvoj jednotlivých jazykových dovedností ukazují na pozitivní přístup studentů k e-learningu, více než polovina respondentů se domnívala, že výsledky pre-testů a post-testů studentů studujících prostřednictvím e-learningu a těmi, kteří studují prostřednictvím výuky face-to-face budou relativně stejné, což se také ve výzkumu potvrdilo.

Závěr

Výzkum prokázal, že neexistují žádné statisticky významné rozdíly mezi výsledky studentů, kteří se učí prostřednictvím metody e-learningu a těmi, kteří studují prostřednictvím výuky face-to-face. Tento výsledek je významným pedagogickým úspěchem a přínosem výzkumu v oblasti ESP e-learningu, neboť zjištění signifikantních statistických rozdílů mezi výsledky studentů obou skupin, respektive zřetelně lepší výsledky studentů studujících klasickou formou face-to-face by znamenalo, že výuka metodou e-learningu nebyla efektivní a nemělo by tedy žádný význam takovouto formu výuky realizovat. Zjištění neexistence statisticky významných rozdílů ve výsledcích

studentů studujících prostřednictvím výuky face-to-face a těmi, kteří studují prostřednictvím e-learningu, však potvrzuje funkčnost a efektivitu výuky metodou e-learningu a opravňuje k pokračování v této formě výuky a k práci na jejím rozšíření a vylepšení. Zároveň opravňuje k využití e-learningového kurzu pro studenty dálkového studia, celoživotního vzdělávání, pro studenty se specifickými potřebami, ale taktéž pro studenty prezenční formy studia v případě dlouhodobé absence.

Rozdíly ve sledovaných dovednostech na začátku a na konci semestru byly statisticky významné jak v experimentální, tak i v kontrolní skupině. Toto zjištění potvrzuje, že si studenti v obou skupinách zlepšili své jazykové dovednosti a slovní zásobu.

V dizertační práci byly shromážděny informace a údaje o ESP, které byly až dosud rozptýleny v různých časopisech, sbornících z konferencí, v diplomových a disertačních pracích atd. Soustředili jsme se na vývoj a klasifikaci ESP, na vymezení metodiky výuky ESP a e-learningu a definic pojmů ESP a e-learning, zejména na naše vlastní vymezení pojmu ESP elearning, o němž se domníváme, že bude v České republice poprvé použito v naší dizertační práci.

Dizertační práce zároveň přispívá k metodice ESP e-learningu prostřednictvím popisu, jak mohou být rozvíjeny a procvičovány jazykové dovednosti a slovní zásoba pomocí e-learningu. Je zde uveden teoretický přehled e-learningových aktivit ESP, které mohou být použity pro rozvoj jazykových dovedností a rozvoj slovní zásoby. Metodika výzkumu v ESP e-learningu může sloužit studentům a učitelům učitelských oborů na pedagogických a filozofických fakultách a dalším učitelům jako praktický návod na realizaci jazykového výzkumu.

Praktickým výsledkem, který byl navržen pro účely empirického výzkumu, je e-learningový kurz, jehož struktura a obsah může být inspirací pro další pedagogy. Výzkum byl proveden za standardních školních podmínek, tudíž design kurzu lze aplikovat i v kurzech jiných cizích jazyků a v jiných úrovních v rámci rozvoje vysokých škol.

13 Resumé – English

The topic of this doctoral dissertation reflects the real needs and stipulated priorities within foreign language teaching at the Faculty of Economics and Management of the Czech University of Life Sciences Prague. One of the priorities in the field of education is reducing the number of contact hours and the reduction of the lecturers´ direct teaching load, which is connected with the use of modern ICT technologies, e-learning courses for full-time forms of studies, for distance studies and for the centres of lifelong learning outside Prague.

The research was conducted within the institution of the CULS Prague in accordance with its long-term aim of educational, scientific, research, development, innovative and other creative activities for the period of 2011 – 2015, as well as in accordance with the language policy of the European Union, with the national policy of language education and with the long-term aims of the Ministry of Education, Youth and Sports of the Czech Republic. For the purposes of this research, the e-learning course was developed within the grant of the Higher Education Institutions Development Fund of the Czech Republic 2011, no. F5-1836.

The main objective of this dissertation is to find out whether the e-learning method (pure online course) of Business English is as effective as the face-to-face instruction, i.e., whether there are no statistically significant differences between the results of students who completed the e-learning course and those who completed the face-to-face course. At the same time, the statistically significant differences between the pre-tests and the post-tests within individual groups are examined, i.e., whether the students improved their skills and vocabulary.The supplementary objective is to find out students´opinion on e-learning depending on the frequencies of their responses and on their qualitative signs. The practical outcome is the ESP e-learning course for the subject of Business English in the Moodle learning management system (LMS).

Theoretical overview

Chapter 1 concerns the language policy in the European, as well as in the national context in relation to the teaching of specific languages and with regard to e-learning. It reflects the current needs of English language teaching in the Czech Republic since the accession to

the European Union. Strategic objectives such as improving the quality and effectiveness of systems and training in the European Union in educational programmes are specified.

Chapter 2 deals with the complex issue of English for specific purposes (ESP) starting with an explanation of the term of special/specific language, continuing with ESP development, its definitions and classification, its relation to the Content and Language Integrated Learning (CLIL), our determination of ESP, and finishing with the position of Business English within ESP in connection with the considerable expansion of international business in recent years (see 2.2). There are many definitions of ESP. They have been brought together in this work to make a survey of what is involved in ESP. Attention to the needs of students seems to be one of the key elements in a number of ESP definitions (Smoak, 2003; Dudley-Evans and St John, 2005; Hutchinson and Waters, 1987). Our view on ESP is expressed as a teaching /learning/ using the English language based on the content that is not contextualised and that is related to the subject specialism and learner's needs. ESP could also be defined as the first stage of the Content and Language Integrated Learning (CLIL). Under the content, we understand the knowledge not only of grammar and terminology, but also the knowledge of elements and definitions of the subject matter (economic and business concepts). We agree with Strother (2005) that ESP includes dualpurpose education – the students learn about the relevant subject matter while they improve their English skills – and therefore have a high level of intrinsic motivation since the students are studying subjects in which they are interested. The methodology of ESP teaching need not differ radically from that of general English; however, there is one basic difference that influences the methodology: learners have specialist knowledge that ESP teachers usually do not have (Hutchinson and Waters, 1987; Kennedy and Bolitho, 1984); ESP teachers are not in the position of primary knowledge-holders. Dudley-Evans and St John (2005: 4) state in their definition of ESP that ESP teaching should be based on the methodology of the disciplines and professions it serves.

Chapter 3 introduces the topic of e-learning. Firstly, it focuses on the development of e-learning and e-learning definitions. Some definitions focus on technological aspects, some more on the educational process of learning (Fedyunina, 2006; Barešová, 2003; Dudeney and Hockly, 2007; Průcha, Walterová and Mareš, 2001; Nevima 2012; Frydrychová Klímová, 2006). E-learning is in the center of attention of educational institutions and is recognised as a strategic asset (Garrison and Anderson, 2003). The support of new

technologies in the lessons with strategic integration of e-learning together with continuous lifelong education enables educational institutions to ensure their leading position on the education market. Specific ESP e-learning methodology, which encompasses language learning, specialist subject learning and e-learning approaches, is also mentioned in this chapter. Finally, the role of the teacher (tutor) and that of the student in ESP e-learning are clarified (Černá, 2005; Vančová, 2007).

ESP e-learning is a term introduced in our dissertation, based on the fact drawn from our experience that nowadays, nearly every university of non-philological orientation tries to provide e-learning courses of English for specific purposes for their students. ESP e-learning courses are being developed in the globalised world in response to the labour market and the needs of educational institutions. They are either purely online courses or blended courses with the support of e-learning. In our opinion, ESP e-learning covers the following aspects: ESP that is viewed in complexity as teaching/learning the English language based on the content that is not contextualised and that is related to subject specialism and learners' needs, and e-learning as the online support of an educational process, and the method through which the ESP course is implemented. Teaching a specialist language through e-learning requires special preparation for language teachers (tutors) and thus a specific methodology that needs to be applied. It is desirable for the teacher to have some knowledge of the subject matter, however, he/she is more of a language consultant and his/her other roles are specified through the e-learning method. Students have usually more expertise in the subject matter than the language teacher.

Advantages and disadvantages of e-learning are also discussed. E-learning is a good way to encourage students to practise the language, and it enables them to adjust learning to their individual needs and time requirements (Vančová, 2007; Dudeney and Hockly, 2007; Galavis, 1998). They are aware of their own aims, they like the chance to work at their own pace and independently. From the psychological point of view, it is sometimes easier for adults to learn languages without being followed and observed by their colleagues during the lessons because they are embarassed to make mistakes in front of their colleagues. Many authors realise that e-learning is motivating for students and they further mention the possibility of the content being kept up-to-date. Feedback within the activities and in the form of tests is very important to the learning process. Tests on computers are

also considered a big advantage because they are immediately assessed and the teacher´s bias is completely eliminated.

There are, however, also some disadvantages of e-learning: some students are undisciplined or have other difficulties as independent students, some skills, such as speaking, are more difficult to practise online, the students may feel isolated, some authors think that computers do not provide the sense of cooperation, whilst others mention the cooperation of students and formation of study teams as an advantage of e-learning. Other problems that could arise with e-learning include technical issues, which may cause accessibility problems. Some students are resistant to ICT usage and some are unable to learn individually because they are heavily dependent on the teacher who provides direction, encouragement and feedback (Černá, 2005). E-learning is not useful for certain types of courses such as those that include experiments and demonstrations (Dudeney and Hockly, 2007; Růžičková 2009; Vančová 2007). Advantages and disadvantages of e-learning are not fully exhausted in this work as many more pros and cons for the implementation of e-learning can be researched.

Chapter 4 concerns ESP e-learning and related theories of language and learning theories, which provide theoretical bases for the ESP e-learning methodology, and are both theoretical bases of the course design. An English language course must be based on a solid foundation of the linguistic theory, especially that related to English for specific purposes, as well as the learning theory, specifically relating to online instruction or e-learning (Strother, 2005).

Our ESP language course derives its linguistic input particularly from the theory of registers (Hutchinson and Waters, 1987) and functional description of language (Bell, 1981). They are not exclusive but complementary and each has its place in the course.

Behaviourism and constructivism (Nesi, 2011; Blázques, 2007) are the relevant theories of learning implied by the activities in our course and providing the bases for ESP e-learning methodology; they are supplemented by our own teaching experience.

Chapter 5 represents a contribution to the ESP e-learning methodology by a theoretical description of the development of the skills and vocabulary, and by suggesting the possibilities of how to develop them practically through ESP e-learning activities (Dudley-Evans a St John, 1998; Harmer 2005). It concerns the development of vocabulary, reading, listening, writing, speaking and translation as the fifth skill in ESP e-learning.

Examples of ESP e-learning activities that can be used for skills and vocabulary development are provided. The survey is based on literature sources and on our own experience. The teaching/learning of the skills and vocabulary should not be undertaken in isolation, the skills are learnt more effectively when taught in an integrated manner. Therefore, we have integrated the practice of several skills into single modules. Using one skill generally involves at least one more of the other skills (reading aloud involves listening, writing involves some reading, reading may lead to a follow-up letter, etc.). Hearing correct pronunciation of a vocabulary item helps store it in the memory and then retrieve it. Similarly, reading and hearing the text at the same time helps improve its understanding and pronunciation. Having this in mind, specialist terms and texts in every module have been recorded by a native speaker.

In chapter 6, literature review concerning the research in the field of ESP e-learning is introduced and discussed. The literature review is organised according to topics related to ESP e-learning and according to whether the research was conducted in the Czech Republic or abroad. The literature review has revealed the absence of scientific research in the field of our investigation.

There have only been very few research studies on ESP e-learning so far, nor have there been any studies on the experimental research that examines the effectiveness of ESP e-learning in comparison with face-to-face instruction. No studies have been found examining whether there are any statistically significant differences in the results of the experimental group and the control group in ESP e-learning, the issue that we have considered significant in connection with long-term aims of our university, the Ministry of Education, Youth and Sports of the Czech Republic, and also of the European Union educational authorities. Our work attempts to address such a shortfall. The description and analysis of research studies have demonstrated that there is a need for the study that will provide significant and new information in the field of the research. It justified why our proposed research study was conducted and led us to the rationale for our research.

Empirical part

The empirical part starts in chapter 7. First of all, language education at the Faculty of Economics and Management at the Czech University of Life Sciences Prague is introduced, and the e-learning course is presented together with the technical solution within the Moodle LMS. The best known authoring tool called Hot Potatoes was used. It is

a small Windows programme by means of which interactive exercises were developed and the material in an electronic format could be stored in Moodle.

The research methodology is presented in chapter 8. The objective of the research is aimed at finding out whether the e-learning method is as effective as the face-to-face instruction, i.e., whether there are no statistically significant differences in the results of students who completed the e-learning course and those who completed the face-to-face instruction.

At the same time, the objective is also to discover whether there are any statistically significant differences in the results of the students at the beginning of the course and at the end of the course within individual groups, i.e. whether the students improved their skills and vocabulary.

This research is concerned with testing hypotheses, with validity and reliability because of the need to demonstrate a relationship between variables unambiguously. It is experimental research conducted under standard school conditions, constructed from situations which already exist in the real world, and which are probably more representative of conditions found in educational contexts. The experimental research is based mostly on quantitative, and partly on qualitative methods of data collection: pre-tests, post-tests and a questionnaire survey.This is supplemented and supported by descriptive statistics (means, standard deviation). On the basis of a detailed study of literature that concerns the research in second language teaching and learning and pedagogical research (Seliger and Shohamy, 1990; Pelikán, 2007; Gavora, 2000; Travers, 1969; Cohen, 2007), the research methodology was stipulated and research questions and hypotheses with sub-hypotheses were formulated (see 8.3).

Is the e-learning method as effective as the method of face-to-face instruction? Is there any statistically significant improvement in the skills and vocabulary of the students after completing the e-learning course and the traditional face-to-face instruction?

What is the student´s opinion on e-learning and on the development of their skills and vocabulay through it?

Hypotheses:

1 There are no statistically significant differences between the results of university students learning specific English for business and economics through e-learning (purely online course) with focus on specialist vocabulary, reading comprehension, listening

comprehension, writing and translation and those studying ESP through the traditional face-to-face method.

2 There are statistically significant differences in listening comprehension, in specialist vocabulary, in reading comprehension, in translation and in writing in the results of university students learning through e-learning (purely online course) between their pre-test and post-test.

3 There are statistically significant differences in listening comprehension, in specialist vocabulary, in reading comprehension, in translation and in writing in the results of university students learning through the face-to-face method between their pre-test and post-test.

The population is represented by students of the Czech University of Life Sciences Prague within the bachelor studies for whom the English language is compulsory and who enrolled into B1 courses according to the CEFR.

The treatment is a controlled and intentional exposure of groups to a language teaching method, specially constructed for the experiment. In our research, it is the e-learning method in the Moodle LMS. The treatment is an independent variable in the research.

Measurement is a dependent variable in the research. It refers to how the effects of the treatment will be evaluated or observed. It is represented by language pre-tests and post-tests as the main research instruments. Questionnaires were used as a supplementary research instrument to find out the students´ opinion on e-learning.

The ESP e-learning course was piloted in the winter term of the 2011/2012 academic year. This phase, which is described in chapter nine, was used for preliminary testing of instruments and to try out the treatment before running a full-scale experiment.

The results of this phase provided information on revisions, changes that had to be made so that the instrument could be used with confidence in the research and provided reliable and valid data. In the pre-research we obtained information on whether the items were too easy or too difficult, and whether the items were well phrased and easily understood by the students. On the basis of the results from the pre-research we decided to adjust the course more to the needs of the students. The time required to administer the instrument was checked, some activities required in questionnaires were added, particularly the listening and writing activities. The structure of the questionnaire for the final research was also slightly modified.

Cronbach´s alpha coefficient was calculated in order to determine whether the tests in the pilot study were consistent, reliable and accurate (Seliger and Shohamy, 1990). The statistical calculation proved that pre-tests were reliable, however, post-tests as research instruments were not reliable as the Cronbach´s alpha coefficient was lower than 0.7. This means that the homogeneity of items was not high and the results could be influenced by the chance. That is why in the study proper the reliability of post-tests had to be increased. In the final research, the form of multiple choice in reading was selected; thus marking was more objective. In this way we have increased the reliability of the tests. The reliability and the content validity of the tests were also strengthened by adding 5 items to the vocabulary subtest and 5 to the listening subtest as we wanted to cover the content of specialist terminology in the lessons in more detail.

The pre-research has shown that e-learning is a very good method for extending vocabulary. In general, the students of the experimental group improved quite significantly. At the beginning of the academic year, the experimental group was a little better than the control group but from the point of view of statistical significance there were no statistically significant differences between the two groups, except for vocabulary (the experimental group was better). At the end of the term, the results were more or less equal, there were no statistically significant differences between them (see 9.3).

In chapter 10, **the study proper** is presented together with research instruments, validity control and verifying tests reliability. Interpretation of the results in pre-tests, post-tests and questionnaires are introduced. Finally, the summary of the findings, limitations of the study and recommendations for further research are discussed.

The research was conducted in the winter term of the academic year 2012/2013.

The independent (treatment = e-learning) and dependent (measurement procedures = tests) variables are the focus of this research. There are other variables whose effects must be controlled. Based on studies of the literature connected to a second language and pedagogical research, we tried hard, when planning the research, to control and minimise the variables that can affect the validity of the research. Therefore, a part of our research work is to defend and confirm the validity and reliability.

The means of total results of the control group (79%) and the experimental group (81%) were close in the pre-tests, and were the same in the post-tests (87% in both groups). There is a similar spread of scores in the pre-tests and the post-tests, which indicates similar

standard deviations in both groups. When standard deviations were computed for both groups, they were low and also close (9%, 10% in pre-tests, 6%, 7% in post-tests).This means that the variability of the control group is nearly the same as that of the experimental group, and that the groups are more homogeneous (Seliger and Shohamy, 1990). This supports the underlying assumption in the research that the two groups are representative samples drawn from the same population to which the research would apply. This research is therefore generalisable and thus applicable outside the immediate research environment. This also supports the validity of the research. The test differences, if any, were due to different teaching methods and not due to other unidentifiable variables (Seliger and Shohamy, 1990; Pelikán, 2007).

In the study proper, we compared and analysed the results of the students who studied through the e-learning method (experimental group) and the results of those who were taught through the face-to-face method (control group). 3,082 students of all forms of studies, i.e., full-time students, distance students and students of lifelong education, were enrolled into English B1 in the winter term of the academic year 2012/2013. The research sample of 107 students is represented by those full-time students of B1 level who enrolled into the optional subject of Business English. Both in the pilot study and in the study proper, we worked with natural groups that existed prior to the research. Students enrolled into the lessons individually on the basis of their specialist schedules and it was not possible to influence how many of them would be enrolled into the subject of Business English and into which days when the Business English lessons were offered. At the beginning of our research, 53 students were in the experimental group and 54 students in the control group. At the end of the winter term, 49 students remained in the experimental group and 45 students in the control group.

We carried out the pre-tests with both groups at the beginning of the winter term of the academic year 2012/2013 in order to determine the level of input skills (listening, reading, writing, translation) and vocabulary of individual students. After completing the course in Business English in the winter term, both groups sat for the post-tests, the purpose of which was to find out the level of skills with the focus on business and economic terminology.

Both of the tests were evaluated in percentage. We used parts of the existing standardised tests as the pre-tests except for translation. The post-tests, consisting of specialist

terminology, were developed by the teacher on the basis of his/her experience, and also in the form of standardised tests. There was an exception of the listening post-test that was also part of the existing standardised test. All tests thus developed were discussed with two other teachers of Business English. For a valid interpretation of test results, scores must have acceptable reliability. The calculation proved that the research instruments (tests) were consistent, i.e., the items were homogeneous (Manual for Language Test Development and Examining, 2011: 17; Seliger and Shohamy 1990: 187; Brown, 1998). Cronbach´s alpha value exceeded 0.7 in all measured cases (in all pre- and post-tests with both the experimental and the control groups). The homogeneity of items was high, the reliability of the research instruments (tests) was also high. Reliability is closely related to the test validity. To be valid, the test must have a high rate of reliability. Based on statistical measurements and on the efforts at the beginning of the research to minimise the breach of the validity, we are confident that the tests were reliable and valid as well.

The aim of the questionnaire survey was to find out the students´ opinion on the influence of e-learning on their skills and vocabulary in comparison with the face-to-face instruction and on the implementation of the e-learning course for distance students based on the frequencies of their responses and on their qualitative signs (year of study, field of study). The survey was conducted during the last lesson in the winter term of 2012/2013. Questionnaires were distributed in the Czech language in order that the questions would be properly understood and answered correctly. The validity of the findings was supposed to be strengthened in this way. We used a non-standardised questionnaire that was composed of 11 Likert scale questions with a high degree of explicitness (Gavora, 2000) and one open question that was intended for the respondents to evaluate the course, write their comments and also recommendations for future implications as the course in the Moodle LMS can be freely updated. Anonymous questionnaires in accordance with ethical considerations in collecting the research data ensured the confidentiality of the research data. Anonymity and the high response rate also increased the validity of the findings and the questionnaires were supposed to bring true and accurate responses.

Results and Discussion

The results of the pre-tests and the post-tests in the study proper were processed into tables and assessed by means of statistical methods at the CULS department of statistics. To test

the statistical hypotheses, non-parametrical tests were chosen owing to the character of the input data, particularly the Mann-Whitney and Wilcoxon pair tests. In the case of dependent samples (pre-tests and post-tests within the same group), the Wilcoxon pair test was used. On the other hand, the Mann-Whitney test is primarily determined to test independent samples (pre-tests and post-tests with different groups). The Statistica 10 statistical programme was used for the calculation. From every table, the statistically significant difference between the results in the pre-tests and the post-tests in single measured activities was calculated. When the p-value, which expresses the lowest possible value of significance, was lower than the significance level of 0.05, the difference was statistically significant (Hindls et al, 2007; Svatošová and Kába, 2012). For the elementary description of the results, absolute and relative frequencies and basic descriptive characteristics, such as the mean and the standard deviation were used as more complex analyses used in analysing the data of experimental research rely on them.

Comparison of the results in the pre-tests between the control group and the experimental group and their interpretation (see 10.4.1)

In the pre-tests there were no statistically significant differences in single skills and vocabulary between the groups. They had almost equal results, and in total, no statistically significant differences were found. This finding is important as it has confirmed that the skills and vocabulary knowledge were nearly the same in both groups at the beginning of the course. The students were homogeneous as far as their skills and vocabulary were concerned.

These statistically measured results were supported and complemented by the analysis of score frequencies in both groups. The objective was to find out how frequently certain test scores occurred in the results of the experimental and control groups and on the basis of this to evaluate the students´ improvement. We grouped the scores into intervals of five as the score range was large (scores ranged from 0-100). Thus, the data were condensed into smaller units and frequencies expressed in the score intervals provided us with information on and better insight into the performance of the students in the tests. These findings in the frequencies of scores supported the statistical calculation that at the beginning of the academic year 2012/2013 there were no statistically significant differences between the groups. This is a very significant finding for carrying out post-tests as the groups were found to be homogeneous.

Comparison of the results in the post-tests between the control group and the experimental group and their interpretation (see 10.4.2)

The research was focused on finding out the influence of e-learning on the students´ results after completing the course, i.e., whether there were any statistically significant differences in the skills and vocabulary of the students between both groups at the end of the ESP e-learning course. Thus, the possibility to exploit the e-learning course for distance students and for centres of lifelong learning was sought.

The analysis revealed that the e-learning method was equally as effective as the face-to-face method. Hypothesis 1 that there are no statistically significant differences between the groups has been proved. All sub-hypotheses have been proved except for sub-hypothesis 1.1 which has been refuted. There were statistically significant differences in listening comprehension between the groups. The students of the experimental group were statistically significantly better only in the listening comprehension. They had the same results as the control group in translation and writing, and very slightly worse results in vocabulary and reading comprehension than the control group, though not statistically significantly.

The data presented above indicate that the e-learning method had a strong influence on the students´ listening skills which improved considerably. The result of the experiment could be also caused by the fact that at the beginning of the lessons, the experimental group was a bit better than the control group (not statistically significantly) and the e-learning helped them enhance their listening skills even more.

Interpretation of the results within the experimental group (10.4.3)

The objective of the analysis was to determine whether there were statistically significant differences in the single skills and vocabulary of the experimental group in the pre-test and the post-test, i.e., whether the students improved or worsened after completing the ESP e-learning course. Results showed that there was a statistically significant difference between the total results in the pre-test and the post-test. In general, the students improved very significantly after completing the e-learning course. All sub-hypotheses have been proved. Hypothesis 2 has been proved.

These statistically measured results may be supported and complemented by the analysis of score frequencies of the experimental group. In total, the mean in the pre-test was 81%, in the post-test 87%. This also proves that the students improved a great deal.

Interpretation of the results within the control group (see 10.4.4)

The objective of the data analysis was to identify whether there were statistically significant differences in the single skills and vocabulary of the control group and whether the students improved or worsened after completing the face-to-face course. All sub-hypotheses have been proved. The difference between the pre-test and the post-test was statistically significant.

Hypothesis 3 has been proved. The students improved a lot in all the skills and vocabulary. These statistically measured results may be supported and complemented by the analysis of score frequencies of the control group. In total, the mean in the pre-test was 79%, in the post-test 87%.

The students in both groups improved in the skills and vocabulary.

The experimental group improved a lot in reading and listening, and a little in writing, translation and vocabulary. The control group also improved a lot in reading and listening, a little less in writing and translation, and quite a lot in vocabulary - more than the experimental group. The reason could be in the help of the teacher with immediate translation or explanation in the face-to-face instruction, or the possibility to do work at home using Moodle.

Interpretation of the results in the questionnaire survey (see 10.4.6)

The data analysis is based on statistical calculation. Students of both groups were given questionnaires in which they expressed their opinion on the appropriateness of the inclusion of e-learning into the lessons of Business English for distance studies and the effectiveness of e-learning as far as the language skills (except for speaking) and vocabulary are concerned. 94 questionnaires in paper form were distributed among the students in the last lesson in the winter term 2012/2013. The return was 93%. In seven questionnaires, the students did not respond to some questions and therefore these questionnaires were excluded from the analysis. The data collected were processed quantitatively, the last open question qualitatively.

The results indicate that most students who took part in the e-learning course supported the inclusion of the e-learning course in the distance studies and thought that the studies through the e-learning method could be as effective as through the face-to-face method. Those students who expressed a negative opinion on the effectiveness did not take part in the e-learning course. On the other hand, as far as the positive attitude to the e-learning

effectiveness is concerned, the number of students who took part in the e-learning online course prevailed. The findings in opinions on the development of single skills show the students´ positive attitude to e-learning. As far as the development of single skills is concerned, more than half of the respondents thought that the results of the pre-tests and the post-tests of the students studying by means of the e-learning online course and those studying through the face-to-face instruction would be relatively the same.

Conclusion

The research revealed no statistically significant differences between the results of students studying through the method of e-learning with those taught through the face-to-face instruction. This finding is considered an important contribution to the research in the field of ESP e-learning and an important pedagogical success as statistically significant differences between the results of the students of both groups, namely better results of the students taught through the face-to-face instruction, would mean that the method of e-learning was not effective, and it would not be appropriate to continue this method. However, the non-existence of statistically significant differences in the research confirms the functionality and effectivity of e-learning and it justifies the continuation of this method of teaching/learning and work on its improvement. It also justifies that the e-learning course can be offered to distance students, to lifelong learning students, to students with specific needs and to full-time students in the case of a long-term absence. The differences between the observed skills and the vocabulary at the beginning and at the end of the term within individual groups were statistically significant. This finding confirms that the students in both groups improved their skills and vocabulary.

The findings from the students´ questionnaires were also very important as they expressed their views on the effectiveness of the e-learning course and its inclusion into distance studies. Most of the students who participated in the e-learning course assessed it positively and thought that it could be included in the distance studies.

In this dissertation, knowledge, information and ideas on ESP, which have been scattered in various journals and conference proceedings so far, have been gathered together. The contribution of this dissertation may be seen in the development, classification, methodology and main definitions of ESP and e-learning, particularly our own determination of ESP e-learning.

We also hoped to contribute to the methodology of ESP e-learning through the description of how skills and vocabulary in ESP could be practised and developed through the e-learning method. A theoretical survey of ESP e-learning activities that can be used for skills and vocabulary development is provided. The survey is based on literature sources and on our own experience. Morover, the research methodology in ESP e-learning can serve students and teachers of languages at pedagogical and philosopical faculties and other teachers as a practical instruction for conducting their language and pedagogical research.

The practical outcome that was designed for the purposes of empirical research is the e-learning course, the structure and the content of which can be an inspiration for other practitioners. The research was conducted under standard school conditions and the design can be applied in the courses of other foreign languages within the higher education institutions development.

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15 Appendices

Appendix 1: Structure of the course

II

Content and style of business letters

This chapter deals with general ideas on how to write business letters, i.e. the right length, style of language, accuracy, taking care with abbreviations and figures, comparison of formal and informal phrases.

30 October 2012

- Key Words + audio
- Specialist text: Content and style of business letters + audio
- Put the words in the correct order
- Match expressions written in formal English with their informal equivalents:
- Match each sentence written in formal English with its informal equivalent:
- Rewriting the informal letter
- Complete the following extract from a letter with correct prepositions:
- Tereza´s class - style and homework for November 1st

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

www.youtube.com

Ashley, A: Oxford Handbook of Commercial Correspondence. OUP. 2003

Ashley, A: Correspondence Workbook. OUP. 2003

Business organizations

Organisation is an arrangement of parts of a group to form an effective whole (Collins Business English Dictionary). After studying this chapter, students should be able to define the essential features of non-incorporated organisations, incorporated organisations and not-for-profit organisations, describe how limited liability and unlimited liability work.

6 November 2012

- Key Words + audio
- Specialist text: Business Organizations + audio
- Business Organizations - reading and gap-filling
- Business Organizations - synonyms
- Business organizations
- Business Organizations - true or false?
- Translation
- Business organizations - duties/responsibilities
- Listening:Talk about English - Part 3 - Meetings
- Tereza´s class: Common collocations + Organizations - part 1

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

www.youtube.com

Company profile

Watch the SIXT company official presentation video below and answer these questions.

a) Which pieces of information is the presentation focused on?

b) What impression does the company video want to make? Which aspects are highlighted and how?

c) Does it work? Is it efficient? Strenghts and weeknesses of the presentation.

13 November 2012

Company profile - SIXT

Now watch the video again and do the two activities below.

Company profile - vocabulary
Company profile - L´Oréal
COMPANY PROFILE - OPTIONAL ACTIVITY (BONUS POINTS AWARDED)
Listening: Talking Business - Negotiations
Tereza´s class - business organizations 2

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

6

Macroeconomics, microeconomics

The social science concerned with the movements of money and a society´s commercial activity is __economics__ . __Economy__ means the operation of a country´s business activities.This chapter deals with the subdivision of economics into macro-economics and micro-economics and the flow of money in the economy.

20 November 2012

Specialist text: The Economic Environment + audio
Key Words + audio
Join the halves of sentences
Fill in the gaps using the words from the list
Replace the words with synonyms
Vocabulary quiz
Multiple-choice test
Translate the following sentences
Topics for discussion
Listening: The truth about the economy(write down and learn basic economic terminology)

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

www.youtube.com

IV

Enquiries, replies, orders

After studying this chapter, students will be able to make enquiries, reply to enquiries by means of activities connected also with the revision of grammar.

27 November 2012

Specialist text: Specimen letter and reply + audio

audio – příprava (prosím nemazat – Administrátor Petr Herold)

Useful language

Complete the enquiry and reply

Rewrite the following questions in reported speech

Complete the following letter with correct prepositions

Choose the best words from the options in brackets

Complete the following letter with the words from the list

Choose the best expressions from the options in brackets

Vocabulary check

Tereza´s class – customer/supplier sequence + homework

Final test – listening

Final test-writing

Final test-vocabulary

Final test-translation

Final test – reading comprehension

Resources:

Personnel Management

Management is the key to business and the glue that holds all elements of business together. Management involves a lot of things such as planning, organising, staffing, controlling, co-ordinating etc. After studying this chapter students should be able to define the term personnel management, define recruitment and selection, distinguish between job description and person specification and describe the essentials of the human resources philosophy.

Key Words + audio

Specialist Text: Personnel Management + audio

Complete these sentences with appropriate conjunctions and prepositions

Matching words with their definitions

Quiz – choose the right answer

gap fillingpersmanagement

Get that job – Interviews

Listening:Talk about English – Part 11 Training, part 1 Job Interviews

Listening: Talking Business – Meetings

Gap filling

Completing

Translation

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

MARKETING

Marketing is the management process which identifies, anticipates and supplies customer requirements efficiently and profitably. (British Chartered Institute of Marketing) After studying this chapter, students should be able to describe the components of marketing mix, forms of marketing communication, marketing tools and explain what marketing research is and why it is important.

Specialist text: Marketing + audio

Key Words + audio

Join the halves of the sentences

Fill-in the gaps with one of the proposed words

Multiple choice quiz

Match the words with their definitions

Fill-in the dialogue with suitable words

VIDEO: Do you know Richard Branson? What do you know about his entrepreneurial activities? How important is HE (personality, image, private life ...) for the company´s marketing?

Richard Branson´s Advice for Entrepreneurs

Richard Branson – video follow-up

Soubor Úpravy Zobrazení Historie Záložky Nástroje Nápověda

Kurz: Angličtina obchodní - B1, Angličtina ob...

https://moodle.czu.cz/course/view.php?id=6626&topic=10

Studijní materiály
Přednášky
Knihy
Fóra
Chatování
Zprávy
Úkoly
Workshopy
Databáze
Testy
Účastníci
Docházky
Konzultace
Klasifikace
MoodleKREMy
Antiplagiáty

Správa
Vypnout režim úprav
Nastavení
Přidělit role
Skupiny
Záloha
Obnova (export)
Sestavy
Testové otázky
Soubory
Vyškrtnout z 1213ZS/ELX05E,05Z
Profil

Osoby

při testu
... spustit ...

Poslední novinky
Přidat nové téma...
(Dosud nebyly vloženy žádné novinky)

Nadcházející události
Žádné nadcházející události

Jdi do kalendáře...
Nová událost...

Nedávná činnost
Výpis od Úterý, 18. červen 2013, 15.48
Úplná sestava o nedávné činnosti...

Nic nového od vašeho posledního přihlášení.

Poslední novinky
Přidat nové téma...
(Dosud nebyly vloženy žádné novinky)

Nadcházející události
Žádné nadcházející

Užitečné odkazy na online cvičení:

Help for English - česky
englishgrammarsecrets.com
www.e-grammar.org
Longman English dictionary on-line

Přidat studijní materiál...   Přidat činnost...

10

ORDERS
Useful Phrases - Placing orders
Useful Phrases - Acknowledging an order
Specimen letter - Placing order
Comprehension questions
Specimen letter - Acknowledging an order
Write sentences using the following verbs with the noun "order"
Write a covering letter for the following order
Choose the best words from the options in brackets
Complete the following letter with the words from the list
Match up the phrases

Přidat studijní materiál...   Přidat činnost...

Přejít na...

Start   Novell GroupWise - S...   Kurz: Angličtina obch...   HP v165w (G:)   ESP with Regards to t...   CS   15:48

Soubor Úpravy Zobrazení Historie Záložky Nástroje Nápověda

Kurz: Angličtina obchodní - B1, Angličtina ob...

https://moodle.czu.cz/course/view.php?id=6626&edit=1&sesskey=SATsRD5pk9

ACCOUNTING AND FINANCE

On a daily basis, businesses have a number of activities that take place (renting office space, paying employee salaries, buying business equipment ...) . Businesses also make a number of long-range business decisions (investing in a new plant and equipment, determining the dividend amount that will be paid to shareholders ...). Whether companies engage in routine business activities or major business decisions, financial outcomes will result. These financial outcomes must be calculated and measured in order to help business run well. Accounting refers to the process used to measure and document these results.

Key Words + audio
Specialist text: Accounting and Finance + audio
Match the words listed below with their definitions
Read through the following sentences and complete the financial terms
Decide whether the following sentences are true or false
Test
Accounting terminology video – watch this video, study the terminology included and then test yourself on the last slides of the video.
Being an accountant – listening comprehension exercise – watch this video and do the gap-fill exercise below
Being_an_accountant.jcl

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

Start   Vyměnitelný disk (G:)   ESP with Regards to t...   Kurz: Angličtina obch...   CS   12:11

PAYMENT

A **payment** is the transfer of money from one party (a person or company) to another. The simplest and oldest form of payment is barter, the exchange of one good or service for another. In the modern world, common means of payment by an individual include money, cheque, or bank transfer, and in business such payments are frequently preceded by an invoice. The party that makes a payment is the **payer** while the **payee** is the party that receives the payment.

Key Words + audio
Specialist text: Payment + audio
Fill-in the gaps with one of the words given
Fill-in the gaps with suitable prepositions
Jumbled letters
Invoicing, request for payment, complaints

Translation – try to translate the sentences/expressions listed on the last three slides of the powerpoint above.

Rewriting – rewrite this apology for delayed payment

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

Ashley, A: Oxford Handbook of Commercial Correspondence. OUP. 2003

Ashley, A: Correspondence Workbook. OUP. 2003

APPLYING FOR A JOB – applications, CVs, cover letters, job contract

In this chapter students will practice how to write a structured currriculum vitae and how to write a cover letter when applying for a job.
Useful Phrases and Expressions + audio
Specialist text 1: A specimen letter + audio
Specialist text 2: Curriculum vitae
Covering letter
Complete the following letter of application
CV
Write your own curriculum vitae
Write an advertisement for your ideal job and continue with your letter of application for the job
Fill in the missing prepositions in the following letter of application
Reading comprehension
Listening comprehension: How to apply for a job
Listening comprehension: Applying for a job – telephone conversation
Sample job contract
Job contract – terminology

Resources:

Lenka Kučírková: English for Business and Correspondence, PEF ČZU Praha 2006

www.youtube.com

Ashley, A: Oxford Handbook of Commercial Correspondence. OUP. 2003

Ashley, A: Correspondence Workbook. OUP. 2003

Source: Moodle

Appendix 2: Content of the course

Specialist text

Gap-fill exercise

Matching exercise

Written assignment - letter

Listening

Multiple choice test

Moodle ČZU (CULS) ► 1213ZS/ELX05E,05Z ► Testy Hot Potatoes ► Multiple-choice

Upravit tuto činnost - Test Hot Potatoes

Multiple-choice

Quiz

Show questions one by one

1. A modern way to lay out a business letter is

   A. [?] a blocked style

   B. [?] an indented style

   C. [?] an abbreviated style

2. The sender's address is written

   A. [?] at the top on the left

   B. [?] at the top on the left or on the right

   C. [?] at the top on the right or printed at the top in the middle

3. The sender's name and title are

Appendix 3: Results of pre-tests and post-tests in pre-research

Pre-test - Control Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 1	100%	88%	80%	80%	100%	88%
Student 2	90%	92%	80%	100%	100%	93%
Student 3	90%	72%	80%	60%	90%	76%
Student 4	100%	76%	80%	100%	100%	87%
Student 5	80%	64%	60%	60%	80%	67%
Student 6	70%	56%	0%	40%	30%	41%
Student 7	90%	76%	60%	80%	90%	78%
Student 8	70%	44%	40%	80%	60%	54%
Student 9	80%	68%	60%	80%	90%	73%
Student 10	70%	52%	40%	100%	80%	64%
Student 11	70%	84%	40%	40%	50%	63%
Student 12	50%	56%	20%	40%	30%	43%
Student 13	60%	72%	40%	60%	90%	67%
Student 14	80%	92%	20%	40%	70%	67%
Student 15	70%	52%	20%	80%	90%	59%
Student 16	70%	56%	80%	40%	80%	63%
Student 17	70%	52%	60%	60%	50%	56%
Student 18	80%	76%	60%	80%	100%	78%
Student 19	70%	56%	60%	80%	70%	64%
Student 20	70%	68%	80%	60%	60%	68%
Mean	77%	68%	53%	68%	76%	67%

Post-test - Control Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 1	100%	90%	100%	79%	90%	91%
Student 2	80%	98%	80%	86%	90%	90%
Student 3	70%	100%	90%	100%	90%	94%
Student 4	90%	100%	80%	86%	70%	89%
Student 5	80%	65%	90%	100%	80%	79%
Student 6	60%	97%	80%	86%	50%	81%
Student 7	80%	75%	90%	86%	70%	79%
Student 8	100%	90%	80%	73%	50%	80%
Student 9	80%	94%	90%	93%	90%	91%
Student 10	90%	94%	80%	93%	50%	84%
Student 11	80%	95%	80%	93%	80%	88%
Student 12	70%	96%	70%	86%	50%	80%
Student 13	90%	85%	90%	60%	100%	85%
Student 14	100%	81%	90%	86%	50%	80%
Student 15	60%	96%	70%	100%	70%	85%
Student 16	80%	94%	90%	93%	90%	91%
Student 17	90%	96%	80%	100%	70%	89%
Student 18	90%	84%	90%	86%	90%	87%
Student 19	60%	94%	70%	100%	50%	81%
Student 20	80%	74%	80%	46%	80%	72%
Mean	82%	90%	84%	87%	73%	85%

Pre-test - Experimental Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 21	90%	80%	60%	80%	80%	78%
Student 22	80%	80%	40%	80%	60%	70%
Student 23	90%	84%	20%	60%	90%	71%
Student 24	100%	100%	100%	100%	90%	98%
Student 25	100%	80%	80%	100%	60%	82%
Student 26	90%	92%	80%	80%	90%	88%
Student 27	80%	68%	80%	40%	80%	68%
Student 28	100%	76%	60%	60%	80%	73%
Student 29	70%	76%	20%	60%	70%	63%
Student 30	90%	84%	80%	40%	80%	76%
Student 31	80%	72%	60%	60%	70%	68%
Student 32	100%	44%	80%	40%	70%	58%
Student 33	90%	72%	80%	60%	60%	71%
Student 34	80%	84%	100%	100%	90%	90%
Student 35	80%	72%	60%	80%	70%	72%
Student 36	80%	88%	40%	80%	70%	75%
Student 37	40%	80%	60%	60%	70%	68%
Student 38	90%	72%	60%	100%	90%	79%
Student 39	70%	72%	80%	60%	80%	73%
Student 40	60%	64%	60%	60%	30%	57%
Mean	83%	77%	65%	70%	74%	74%

Post-test - Experimental Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 21	80%	89%	100%	80%	100%	90%
Student 22	70%	86%	100%	66%	100%	86%
Student 23	90%	98%	60%	80%	60%	82%
Student 24	90%	94%	90%	100%	60%	88%
Student 25	50%	100%	80%	100%	70%	88%
Student 26	90%	85%	100%	73%	70%	83%
Student 27	70%	98%	70%	100%	50%	83%
Student 28	90%	90%	80%	100%	80%	88%
Student 29	80%	98%	60%	73%	70%	81%
Student 30	90%	94%	80%	100%	90%	92%
Student 31	70%	90%	80%	86%	80%	84%
Student 32	90%	77%	80%	80%	60%	76%
Student 33	50%	89%	90%	86%	70%	82%
Student 34	90%	89%	50%	93%	80%	82%
Student 35	70%	90%	80%	86%	50%	79%
Student 36	70%	77%	80%	60%	50%	70%
Student 37	50%	84%	90%	80%	100%	84%
Student 38	90%	80%	80%	86%	70%	80%
Student 39	80%	93%	70%	100%	80%	87%
Student 40	50%	98%	90%	100%	100%	93%
Mean	76%	90%	81%	86%	75%	84%

Appendix 4: Statistical analysis of the results in pre-tests and post-tests in the pilot study (pre-research)

Úterý

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Listening & Listening	17	46,00000	1,443812	0,148793

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Vocabulary & Vocabulary	20	9,000000	3,583936	0,000339

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Reading & Reading	17	0,00	3,621365	0,000293

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Translation & Translation	19	34,00000	2,454773	0,014098

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Writing & Writing	17	65,00000	0,544388	0,586175

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Total & Total	20	3,500000	3,789266	0,000151

Středa

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Listening & Listening	16	30,00000	1,964933	0,049423

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Vocabulary & Vocabulary	20	17,50000	3,266609	0,001089

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Reading & Reading	17	23,50000	2,508920	0,012111

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Translation & Translation	17	24,00000	2,485251	0,012947

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Writing & Writing	17	69,50000	0,331367	0,740368

Dvojice proměnných	Wilcoxonův párový test (pretest11-úterý) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Total & Total	20	18,00000	3,247942	0,001163

Porovnání úterý a středy výsledků testu - pre

Proměnná	Mann-Whitneyův U test (pretest11-úterý)							
	Dle proměn. den							
	Označené testy jsou významné na hladině p <,05000							
	Sčt poř. utery	Sčt poř. streda	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. utery
výsledek kontrolní	343,5000	476,5000	133,5000	-1,78531	<mark>0,074213</mark>	-1,78673	0,073982	20

Proměnná	Mann-Whitneyův U test (pretest11-úterý)	
	Dle proměn. den	
	Označené testy jsou významné na hladině p <,05000	
	N platn. streda	2*1str. přesné p
výsledek kontrolni	20	0,071777

Porovnání úterý a středy výsledků testu - post

Proměnná	Mann-Whitneyův U test (pretest11-úterý)							
	Dle proměn. den							
	Označené testy jsou významné na hladině p <,05000							
	Sčt poř. utery	Sčt poř. streda	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. utery
výsledek	422,5000	397,5000	187,5000	0,324601	<mark>0,745483</mark>	0,324647	0,745449	20

Proměnná	Mann-Whitneyův U test (pretest11-úterý)	
	Dle proměn. den	
	Označené testy jsou významné na hladině p <,05000	
	N platn. streda	2*1str. přesné p
výsledek	20	0,738062

Pre-test

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls)							
	Dle proměn. den							
	Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Listening	342,5000	477,5000	132,5000	-1,81236	0,069932	-1,86017	0,062862	20

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls)	
	Dle proměn. den	
	Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Listening	20	0,067501

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls)							
	Dle proměn. den							
	Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Vocabulary	332,0000	488,0000	122,0000	-2,09638	0,036049	-2,10838	0,034999	20

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls)	
	Dle proměn. den	
	Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Vocabulary	20	0,035011

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Reading	357,0000	463,0000	147,0000	-1,42013	0,155571	-1,47542	0,140100	20

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Reading	20	0,157160

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Translation	401,0000	419,0000	191,0000	-0,229926	0,818150	-0,238950	0,811144	20

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Translation	20	0,820148

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Writing	437,0000	383,0000	173,0000	0,716827	0,473481	0,729530	0,465678	20

Proměnná	Mann-Whitneyův U test (List2 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Writing	20	0,477691

Post test

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Listening post	448,5000	371,5000	161,5000	1,027903	0,303996	1,058270	0,289933	20

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Listening post	20	0,301253

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Vocabulary post	429,0000	391,0000	181,0000	0,500427	0,616775	0,502553	0,615279	20

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Vocabulary post	20	0,620465

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Reading post	432,5000	387,5000	177,5000	0,595102	0,551776	0,625049	0,531939	20

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Reading post	20	0,546823

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Translation post	420,0000	400,0000	190,0000	0,256976	0,797198	0,263756	0,791968	20

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Translation post	20	0,799407

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000							
	Sčt poř. ut	Sčt poř. str	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. ut
Writing post	403,0000	417,0000	193,0000	-0,175826	0,860431	-0,179011	0,857929	20

Proměnná	Mann-Whitneyův U test (List3 v Importován z C:and Settings-utery.xls) Dle proměn. den Označené testy jsou významné na hladině p <,05000	
	N platn. str	2*1str. přesné p
Writing post	20	0,861987

Appendix 5: Reliability statistics in the pre-research

Pre-test: control group

Case Processing Summary

		N	%
	Valid	20	100,0
Cases	Excluded[a]	0	,0
	Total	20	100,0

a. Listwise deletion based on all variables in the procedure.

Cronbach alfa.

Reliability Statistics

Cronbach's Alpha	N of Items
,765	6

Post-test: control group

Case Processing Summary

		N	%
	Valid	20	100,0
Cases	Excluded[a]	0	,0
	Total	20	100,0

a. Listwise deletion based on all variables in the

procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,565	6

Pre-test: experimental group

Case Processing Summary

		N	%
	Valid	20	100,0
Cases	Excluded[a]	0	,0
	Total	20	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,717	6

Post-test: experimental group

Case Processing Summary

		N	%
	Valid	20	100,0
Cases	Excluded[a]	0	,0
	Total	20	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,476	6

Appendix 6: Questionnaire (pre-research)

Dotazník

Katedra jazyků, PEF, ČZU v Praze – leden 2012

Milí studenti, prosím o vyplnění následujícího dotazníku vztahujícímu se k e-learningové výuce Obchodní angličtiny (AO). Správnou odpověď prosím zakroužkujte.

1. Pohlaví: a) muž   b) žena

2. Obor studia: a) PAE   b) PAA   c) OPT   d) jiný

3. Ročník: a) první   b) druhý   c) třetí

4. Účast na e-learningovém kurzu Obchodní angličtiny: a) ano   b) ne

5. Myslíte si, že zařazení e-learningu do výuky odborného anglického jazyka (AO) v rámci distančního studia je?
   a) vhodné   b) nevhodné   c) nevím

6. Myslíte si, že výuka anglického odborného jazyka (AO) pomocí e-learningu (s vyloučením řečové dovednosti mluvení) může být stejně efektivní jako přímá výuka s učitelem - face to face?
   a) ano
   b) spíše ano
   c) spíše ne
   d) ne
   e) nevím

7. Myslíte si, že rozvoj řečové dovednosti **čtení s porozuměním** pomocí e-learningu může být stejně efektivní jako při výuce face to face?
   a) ano
   b) spíše ano

c) spíše ne

d) ne

e) nevím

8. Myslíte si, že rozvoj řečové dovednosti **poslechu s porozuměním** pomocí e-learningu může být stejně efektivní jako při výuce face to face?

   a) ano

   b) spíše ano

   c) spíše ne

   d) ne

   e) nevím

9. Myslíte si, že rozvoj řečové dovednosti **písemného projevu** pomocí e-learningu může být stejně efektivní jako při výuce face to face?

   a) ano

   b) spíše ano

   c) spíše ne

   d) ne

   e) nevím

10. Myslíte si, že rozvoj řečové dovednosti **překladu** pomocí e-learningu může být stejně efektivní jako při výuce face to face?

    a) ano

    b) spíše ano

    c) spíše ne

    d) ne

    e) nevím

11. Myslíte si, že rozvoj **slovní zásoby** pomocí e-learningu může být stejně efektivní jako při výuce face to face?

    a) ano

    b) spíše ano

c) spíše ne

d) ne

e) nevím

Pokud jste absolvovali e-learningový kurz Obchodní angličtiny, prosím o jakýkoliv komentář ke kurzu ohledně jeho vylepšení s cílem jeho použití pro samostudium a distanční studium.

12. Komentář:

Děkuji za spolupráci,
Lenka Kučírková

Appendix 7: Table with results of questionnaires (pre-research)

	Polož. č.1	Polož. č.2	Polož. č.3	Polož. č.4	Polož. č.5	Polož. č.6	Polož. č.7	Polož. č.8	Polož. č.9	Polož. č.10	Polož. č.11
Dot.č.1	a	b	a	a	a	a	a	c	a	b	a
Dot.č.2	a	a	a	a	a	c	b	b	c	c	d
Dot.č.3	a	c	c	a	a	c	c	a	b	b	b
Dot.č.4	a	a	a	a	a	b	b	b	b	b	a
Dot.č.5	a	b	a	a	a	b	a	a	a	a	a
Dot.č.6	a	a	a	a	a	c	b	b	a	a	a
Dot.č.7	a	a	a	a	a	c	b	a	a	a	b
Dot.č.8	b	a	a	a	a	b	b	b	a	a	a
Dot.č.9	b	a	a	a	a	c	b	b	a	b	a
Dot.č.10	b	a	a	a	a	c	c	b	a	a	b
Dot.č.11	a	c	c	a	b	d	c	c	c	d	b
Dot.č.12	a	b	a	a	a	b	a	a	a	a	b
Dot.č.13	a	c	b	a	c	c	c	c	b	b	b
Dot.č.14	a	d	b	a	a	b	b	a	b	b	a
Dot.č.15	a	c	c	a	a	c	c	b	a	b	b
Dot.č.16	b	d	a	a	a	b	b	a	a	b	b
Dot.č.17	b	c	c	a	a	b	a	a	a	a	b
Dot.č.18	b	b	a	a	a	b	a	a	a	a	a
Dot.č.19	b	b	a	a	b	c	b	a	b	d	c
Dot.č.20	b	d	a	a	a	c	d	b	c	b	d
Dot.č.21	a	d	a	b	a	c	b	b	c	b	b
Dot.č.22	a	b	a	b	a	b	b	b	a	a	a
Dot.č.23	a	c	c	b	c	e	e	e	e	e	e
Dot.č.24	a	d	a	b	a	b	c	c	b	b	a
Dot.č.25	a	a	a	b	a	c	c	c	a	b	a
Dot.č.26	a	d	a	b	a	c	d	b	a	c	b
Dot.č.27	a	d	a	b	c	d	b	c	a	a	b
Dot.č.28	a	c	c	b	a	e	e	e	e	e	e
Dot.č.29	a	b	a	b	c	c	d	c	b	a	a
Dot.č.30	a	c	c	b	a	b	a	c	a	b	a
Dot.č.31	a	d	a	b	c	b	b	b	b	b	b
Dot.č.32	a	b	a	b	c	d	d	a	d	d	d
Dot.č.33	a	c	c	b	a	b	c	b	a	a	a
Dot.č.34	b	c	c	b	a	d	d	c	b	b	b
Dot.č.35	b	d	a	b	a	b	d	c	a	a	b

Dot.č.36	b	b	a	b	a	a	d	a	a	d	c
Dot.č.37	b	d	a	b	a	a	a	c	c	a	a
Dot.č.38	b	a	a	b	a	b	a	a	b	b	a
Dot.č.39	b	c	c	b	a	b	a	c	a	a	a
Dot.č.40	b	d	a	b	a	b	b	a	a	b	a

Appendix 8: Statistical analysis of questionnaire results in pre-research

Kategorie	Tabulka četností:Polož.č.1 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	**Rel.četnost**	Kumulativní rel.četnost
a	25	25	62,50000	62,5000
b	15	40	37,50000	100,0000
ChD	0	40	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.2 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
b	9	9	22,50000	22,5000
a	9	18	22,50000	45,0000
c	11	29	27,50000	72,5000
d	11	40	27,50000	100,0000
ChD	0	40	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.3 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	28	28	70,00000	70,0000
c	10	38	25,00000	95,0000
b	2	40	5,00000	100,0000
ChD	0	40	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.4 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	20	20	50,00000	50,0000
b	20	40	50,00000	100,0000
ChD	0	40	0,00000	100,0000

Tabulka četností:Polož.č.5 (Kopie - Vysledkydotazniku)				
Kategorie	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	32	32	80,00000	80,0000
b	2	34	5,00000	85,0000
c	6	40	15,00000	100,0000
ChD	0	40	0,00000	100,0000

Tabulka četností:Polož.č.6 (Kopie - Vysledkydotazniku)				
Kategorie	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	3	3	7,50000	7,5000
c	14	17	35,00000	42,5000
b	17	34	42,50000	85,0000
d	4	38	10,00000	95,0000
e	2	40	5,00000	100,0000
ChD	0	40	0,00000	100,0000

Tabulka četností:Polož.č.7 (Kopie - Vysledkydotazniku)				
Kategorie	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	9	9	22,50000	22,5000
b	14	23	35,00000	57,5000
c	8	31	20,00000	77,5000
d	7	38	17,50000	95,0000
e	2	40	5,00000	100,0000
ChD	0	40	0,00000	100,0000

Tabulka četností:Polož.č.8 (Kopie - Vysledkydotazniku)				
Kategorie	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
c	12	12	30,00000	30,0000
b	13	25	32,50000	62,5000

Kategorie	Tabulka četností:Polož.č.8 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	13	38	32,50000	95,0000
e	2	40	5,00000	100,0000
ChD	0	40	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.9 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	22	22	55,00000	55,0000
c	5	27	12,50000	67,5000
b	10	37	25,00000	92,5000
e	2	39	5,00000	97,5000
d	1	40	2,50000	100,0000
ChD	0	40	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.10 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
b	17	17	42,50000	42,5000
c	2	19	5,00000	47,5000
a	15	34	37,50000	85,0000
d	4	38	10,00000	95,0000
e	2	40	5,00000	100,0000
ChD	0	40	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.11 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	18	18	45,00000	45,0000
d	3	21	7,50000	52,5000
b	15	36	37,50000	90,0000
c	2	38	5,00000	95,0000

Kategorie	Tabulka četností:Polož.č.10 (Kopie - Vysledkydotazniku)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
e	2	40	5,00000	100,0000
ChD	0	40	0,00000	100,0000

Analýza kvalitativních znaků - pohlaví

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)			
	Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 b	Polož.č.5 c	Řádk. součty
a	18	1	6	25
b	14	1	0	15
Celk.	32	2	6	40

Testování v tabulce

Statist.	Statist. : Polož.č.1(2) x Polož.č.5(3) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	4,266667	df=2	p=,11845
M-V chí-kvadr.	6,292361	df=2	p=,04302
Fí	,3265986		
Kontingenční koeficient	,3104602		
Cramér. V	,3265986		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.6 a	Polož.č.6 c	Polož.č.6 b	Polož.č.6 d	Polož.č.6 e	Řádk. součty
a	1	10	9	3	2	25
b	2	4	8	1	0	15
Celk.	3	14	17	4	2	40

Statist.	Statist. : Polož.č.1(2) x Polož.č.6(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	3,694491	df=4	p=,44893
M-V chí-kvadr.	4,347598	df=4	p=,36101
Fí	,3039116		
Kontingenční koeficient	,2907796		
Cramér. V	,3039116		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.7 a	Polož.č.7 b	Polož.č.7 c	Polož.č.7 d	Polož.č.7 e	Řádk. součty
a	4	9	7	3	2	25
b	5	5	1	4	0	15
Celk.	9	14	8	7	2	40

Statist.	Statist. : Polož.č.1(2) x Polož.č.7(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,756614	df=4	p=,21809
M-V chí-kvadr.	6,721531	df=4	p=,15137
Fí	,3793617		
Kontingenční koeficient	,3546962		
Cramér. V	,3793617		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)				
	Četnost označených buněk > 10				
	Polož.č.8 c	Polož.č.8 b	Polož.č.8 a	Polož.č.8 e	Řádk. součty
a	8	9	6	2	25
b	4	4	7	0	15
Celk.	12	13	13	2	40

Statist.	Statist. : Polož.č.1(2) x Polož.č.8(4) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	3,022222	df=3	p=,38822
M-V chí-kvadr.	3,655605	df=3	p=,30114
Fí	,2748737		
Kontingenční koeficient	,2650433		
Cramér. V	,2748737		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 e	Polož.č.9 d	Řádk. součty
a	12	3	7	2	1	25
b	10	2	3	0	0	15
Celk.	22	5	10	2	1	40

Statist.	Statist. : Polož.č.1(2) x Polož.č.9(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	2,647273	df=4	p=,61847
M-V chí-kvadr.	3,661250	df=4	p=,45379
Fí	,2572583		
Kontingenční koeficient	,2491459		
Cramér. V	,2572583		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.10 b	Polož.č.10 c	Polož.č.10 a	Polož.č.10 d	Polož.č.10 e	Řádk. součty
a	11	2	8	2	2	25
b	6	0	7	2	0	15
Celk.	17	2	15	4	2	40

Statist.	Statist. : Polož.č.1(2) x Polož.č.10(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	3,239738	df=4	p=,51854
M-V chí-kvadr.	4,577738	df=4	p=,33344
Fí	,2845935		
Kontingenční koeficient	,2737244		
Cramér. V	,2845935		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10					
	Polož.č.11 a	Polož.č.11 d	Polož.č.11 b	Polož.č.11 c	Polož.č.11 e	Řádk. součty
a	11	2	10	0	2	25
b	7	1	5	2	0	15
Celk.	18	3	15	2	2	40

Statist.	Statist. : Polož.č.1(2) x Polož.č.11(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	4,681481	df=4	p=,32157
M-V chí-kvadr.	5,953604	df=4	p=,20265
Fí	,3421068		
Kontingenční koeficient	,3236890		
Cramér. V	,3421068		

Analýza kvalitativních znaků – obor studia

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 b	Polož.č.5 c	Řádk. součty
b	6	1	2	9
a	9	0	0	9
c	8	1	2	11
d	9	0	2	11
Celk.	32	2	6	40

Statist.	Statist. : Polož.č.2(4) x Polož.č.5(3) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	4,579124	df=6	p=,59881
M-V chí-kvadr.	6,612109	df=6	p=,35822
Fí	,3383462		
Kontingenční koeficient	,3204981		
Cramér. V	,2392469		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10					
	Polož.č.6 a	Polož.č.6 c	Polož.č.6 b	Polož.č.6 d	Polož.č.6 e	Řádk. součty
b	2	2	4	1	0	9
a	0	6	3	0	0	9
c	0	3	4	2	2	11
d	1	3	6	1	0	11
Celk.	3	14	17	4	2	40

Statist.	Statist. : Polož.č.2(4) x Polož.č.6(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	15,10002	df=12	p=,23603
M-V chí-kvadr.	15,87372	df=12	p=,19711
Fí	,6144107		
Kontingenční koeficient	,5234954		
Cramér. V	,3547302		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.7 a	Polož.č.7 b	Polož.č.7 c	Polož.č.7 d	Polož.č.7 e	Řádk. součty
b	4	2	0	3	0	9
a	1	6	2	0	0	9
c	3	0	5	1	2	11
d	1	6	1	3	0	11
Celk.	9	14	8	7	2	40

Statist.	Statist. : Polož.č.2(4) x Polož.č.7(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	26,70675	df=12	p=,00852
M-V chí-kvadr.	32,05259	df=12	p=,00136
Fí	,8171100		
Kontingenční koeficient	,6327405		
Cramér. V	,4717587		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10				
	Polož.č.8 c	Polož.č.8 b	Polož.č.8 a	Polož.č.8 e	Řádk. součty
b	2	1	6	0	9
a	1	6	2	0	9
c	5	2	2	2	11
d	4	4	3	0	11
Celk.	12	13	13	2	40

Statist.	Statist. : Polož.č.2(4) x Polož.č.8(4) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	17,10438	df=9	p=,04712
M-V chí-kvadr.	16,44710	df=9	p=,04713
Fí	,6539185		
Kontingenční koeficient	,5472918		
Cramér. V	,3775400		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 e	Polož.č.9 d	Řádk. součty
b	6	0	2	0	1	9
a	6	1	2	0	0	9
c	5	1	3	2	0	11
d	5	3	3	0	0	11
Celk.	22	5	10	2	1	40

Statist.	Statist. : Polož.č.2(4) x Polož.č.9(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	12,78972	df=12	p=,38452
M-V chí-kvadr.	12,86211	df=12	p=,37916
Fí	,5654581		
Kontingenční koeficient	,4922161		
Cramér. V	,3264674		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10					
	Polož.č.10 b	Polož.č.10 c	Polož.č.10 a	Polož.č.10 d	Polož.č.10 e	Řádk. součty
b	1	0	5	3	0	9
a	4	1	4	0	0	9
c	5	0	3	1	2	11
d	7	1	3	0	0	11
Celk.	17	2	15	4	2	40

Statist.	Statist. : Polož.č.2(4) x Polož.č.10(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	19,00733	df=12	p=,08837
M-V chí-kvadr.	20,45641	df=12	p=,04895
Fí	,6893353		
Kontingenční koeficient	,5675545		
Cramér. V	,3979879		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10					
	Polož.č.11 a	Polož.č.11 d	Polož.č.11 b	Polož.č.11 c	Polož.č.11 e	Řádk. součty
b	5	1	1	2	0	9
a	6	1	2	0	0	9
c	3	0	6	0	2	11
d	4	1	6	0	0	11
Celk.	18	3	15	2	2	40

Statist.	Statist. : Polož.č.2(4) x Polož.č.11(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	19,38496	df=12	p=,07967
M-V chí-kvadr.	19,66865	df=12	p=,07364
Fí	,6961494		
Kontingenční koeficient	,5713395		
Cramér. V	,4019220		

Analýza kvalitativních znaků – absolvování kurzu

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 b	Polož.č.5 c	Řádk. součty
a	17	2	1	20
b	15	0	5	20
Celk.	32	2	6	40

Statist.	Statist. : Polož.č.4(2) x Polož.č.5(3) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	4,791667	df=2	p=,09110
M-V chí-kvadr.	5,808702	df=2	p=,04479
Fí	,3461093		
Kontingenční koeficient	,3270730		
Cramér. V	,3461093		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.6 a	Polož.č.6 c	Polož.č.6 b	Polož.č.6 d	Polož.č.6 e	Řádk. součty
a	1	10	8	1	0	20
b	2	4	9	3	2	20
Celk.	3	14	17	4	2	40

Statist.	Statist. : Polož.č.4(2) x Polož.č.6(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,963585	df=4	p=,20189
M-V chí-kvadr.	6,874313	df=4	p=,14269
Fí	,3861213		
Kontingenční koeficient	,3602026		
Cramér. V	,3861213		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.7 a	Polož.č.7 b	Polož.č.7 c	Polož.č.7 d	Polož.č.7 e	Řádk. součty
a	5	9	5	1	0	20
b	4	5	3	6	2	20
Celk.	9	14	8	7	2	40

Statist.	Statist. : Polož.č.4(2) x Polož.č.7(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	7,325397	df=4	p=,11967
M-V chí-kvadr.	8,510642	df=4	p=,04457
Fí	,4279427		
Kontingenční koeficient	,3934309		
Cramér. V	,4279427		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)				
	Četnost označených buněk > 10				
	Polož.č.8 c	Polož.č.8 b	Polož.č.8 a	Polož.č.8 e	Řádk. součty
a	3	8	9	0	20
b	9	5	4	2	20
Celk.	12	13	13	2	40

Statist.	Statist. : Polož.č.4(2) x Polož.č.8(4) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	7,615385	df=3	p=,05467
M-V chí-kvadr.	8,584206	df=3	p=,03537
Fí	,4363309		
Kontingenční koeficient	,3999192		
Cramér. V	,4363309		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku)					
	Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 e	Polož.č.9 d	Řádk. součty
a	12	3	5	0	0	20
b	10	2	5	2	1	20
Celk.	22	5	10	2	1	40

Statist.	Statist. : Polož.č.4(2) x Polož.č.9(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	3,381818	df=4	p=,49608
M-V chí-kvadr.	4,542308	df=4	p=,33757
Fí	,2907670		
Kontingenční koeficient	,2792037		
Cramér. V	,2907670		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10					
	Polož.č.10 b	Polož.č.10 c	Polož.č.10 a	Polož.č.10 d	Polož.č.10 e	Řádk. součty
a	9	1	8	2	0	20
b	8	1	7	2	2	20
Celk.	17	2	15	4	2	40

Statist.	Statist. : Polož.č.4(2) x Polož.č.10(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	2,125490	df=4	p=,71269
M-V chí-kvadr.	2,898162	df=4	p=,57501
Fí	,2305152		
Kontingenční koeficient	,2246245		
Cramér. V	,2305152		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Kopie - Vysledkydotazniku) Četnost označených buněk > 10					
	Polož.č.11 a	Polož.č.11 d	Polož.č.11 b	Polož.č.11 c	Polož.č.11 e	Řádk. součty
a	8	2	9	1	0	20
b	10	1	6	1	2	20
Celk.	18	3	15	2	2	40

Statist.	Statist. : Polož.č.4(2) x Polož.č.11(5) (Kopie - Vysledkydotazniku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	3,155555	df=4	p=,53214
M-V chí-kvadr.	3,939134	df=4	p=,41431
Fí	,2808717		
Kontingenční koeficient	,2704080		
Cramér. V	,2808717		

Závislosti na ročníku studia

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníku) Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 b	Polož.č.5 c	Řádk. součty
a	23	1	4	28
c	8	1	1	10
b	1	0	1	2
Celk.	32	2	6	40

Statist.	Statist. : Polož.č.3(3) x Polož.č.5(3) (Výsledkydotazníku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	2,764881	df=4	p=,59791
M-V chí-kvadr.	2,195966	df=4	p=,69977
Fí	,2629107		
Kontingenční koeficient	,2542697		
Cramér. V	,1859059		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníku)					
	Četnost označených buněk > 10					
	Polož.č.6 a	Polož.č.6 c	Polož.č.6 b	Polož.č.6 d	Polož.č.6 e	Řádk. součty
a	3	11	12	2	0	28
c	0	2	4	2	2	10
b	0	1	1	0	0	2
Celk.	3	14	17	4	2	40

Statist.	Statist. : Polož.č.3(3) x Polož.č.6(5) (Výsledkydotazníku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	9,674670	df=8	p=,28861
M-V chí-kvadr.	10,16898	df=8	p=,25337
Fí	,4917995		
Kontingenční koeficient	,4413169		
Cramér. V	,3477547		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníku)					
	Četnost označených buněk > 10					
	Polož.č.7 a	Polož.č.7 b	Polož.č.7 c	Polož.č.7 d	Polož.č.7 e	Řádk. součty
a	6	13	3	6	0	28
c	3	0	4	1	2	10
b	0	1	1	0	0	2
Celk.	9	14	8	7	2	40

Statist.	Statist. : Polož.č.3(3) x Polož.č.7(5) (Výsledkydotazníku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	16,41327	df=8	p=,03683
M-V chí-kvadr.	19,68977	df=8	p=,01158
Fí	,6405714		
Kontingenční koeficient	,5393950		
Cramér. V	,4529523		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníku)				
	Četnost označených buněk > 10				
	Polož.č.8 c	Polož.č.8 b	Polož.č.8 a	Polož.č.8 e	Řádk. součty
a	7	11	10	0	28
c	4	2	2	2	10
b	1	0	1	0	2
Celk.	12	13	13	2	40

	Statist. : Polož.č.3(3) x Polož.č.8(4) (Výsledkydotazníku)		
Statist.	Chí-kvadr.	sv	p
Pearsonův chí-kv.	9,119047	df=6	p=,16699
M-V chí-kvadr.	9,351159	df=6	p=,15477
Fí	,4774685		
Kontingenční koeficient	,4308735		
Cramér. V	,3376212		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníku) Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 e	Polož.č.9 d	Řádk. součty
a	17	4	6	0	1	28
c	5	1	2	2	0	10
b	0	0	2	0	0	2
Celk.	22	5	10	2	1	40

	Statist. : Polož.č.3(3) x Polož.č.9(5) (Výsledkydotazníku)		
Statist.	Chí-kvadr.	sv	p
Pearsonův chí-kv.	12,85455	df=8	p=,11695
M-V chí-kvadr.	12,09094	df=8	p=,14719
Fí	,5668895		
Kontingenční koeficient	,4931593		
Cramér. V	,4008514		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníku)					
	Četnost označených buněk > 10					
	Polož.č.10 b	Polož.č.10 c	Polož.č.10 a	Polož.č.10 d	Polož.č.10 e	Řádk. součty
a	11	2	12	3	0	28
c	4	0	3	1	2	10
b	2	0	0	0	0	2
Celk.	17	2	15	4	2	40

Statist.	Statist. : Polož.č.3(3) x Polož.č.10(5) (Výsledkydotazníku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	9,824369	df=8	p=,27757
M-V chí-kvadr.	10,45925	df=8	p=,23426
Fí	,4955898		
Kontingenční koeficient	,4440496		
Cramér. V	,3504349		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníku)					
	Četnost označených buněk > 10					
	Polož.č.11 a	Polož.č.11 d	Polož.č.11 b	Polož.č.11 c	Polož.č.11 e	Řádk. součty
a	14	3	9	2	0	28
c	3	0	5	0	2	10
b	1	0	1	0	0	2
Celk.	18	3	15	2	2	40

Statist.	Statist. : Polož.č.3(3) x Polož.č.11(5) (Výsledkydotazníku)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	9,523809	df=8	p=,30005
M-V chí-kvadr.	10,51742	df=8	p=,23057
Fí	,4879500		
Kontingenční koeficient	,4385290		
Cramér. V	,3450328		

Appendix 9: Results of pre-tests and post-tests in the experimental research - The Study Proper

Pre-test - Control Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 1	70%	95%	93%	83%	67%	86%
Student 2	70%	88%	93%	93%	76%	86%
Student 3	60%	78%	93%	79%	67%	77%
Student 4	70%	93%	93%	96%	86%	90%
Student 5	60%	85%	86%	83%	86%	83%
Student 6	60%	80%	80%	86%	76%	79%
Student 7	70%	70%	100%	83%	86%	80%
Student 8	60%	86%	100%	86%	76%	85%
Student 9	50%	88%	80%	93%	76%	82%
Student 10	90%	100%	93%	96%	76%	93%
Student 11	70%	78%	93%	83%	86%	82%
Student 12	70%	76%	100%	83%	67%	79%
Student 13	70%	86%	86%	90%	76%	84%
Student 14	70%	80%	100%	76%	86%	83%
Student 15	80%	84%	100%	96%	67%	85%
Student 16	70%	71%	100%	73%	76%	77%
Student 17	80%	86%	93%	93%	76%	86%
Student 18	70%	80%	73%	86%	76%	78%
Student 19	70%	60%	60%	90%	76%	69%
Student 20	80%	78%	80%	86%	67%	78%
Student 21	90%	58%	79%	79%	76%	71%
Student 22	90%	83%	93%	96%	86%	88%
Student 23	90%	81%	93%	0%	95%	73%
Student 24	70%	96%	86%	96%	86%	90%
Student 25	70%	81%	0%	83%	76%	66%
Student 26	60%	83%	73%	79%	67%	76%
Student 27	30%	74%	79%	70%	57%	68%
Student 28	30%	56%	0%	0%	67%	37%
Student 29	80%	85%	80%	93%	86%	85%

Student 30	80%	98%	93%	96%	95%	95%
Student 31	60%	71%	86%	90%	86%	78%
Student 32	80%	85%	86%	83%	76%	83%
Student 33	70%	86%	93%	80%	76%	83%
Student 34	70%	76%	53%	83%	76%	73%
Student 35	70%	88%	86%	86%	76%	84%
Student 36	70%	75%	60%	80%	76%	73%
Student 37	60%	91%	86%	93%	67%	84%
Student 38	70%	88%	93%	93%	76%	86%
Student 39	70%	85%	86%	96%	86%	86%
Student 40	80%	95%	80%	79%	76%	85%
Student 41	70%	61%	73%	90%	76%	71%
Student 42	90%	55%	40%	50%	67%	57%
Student 43	60%	78%	80%	89%	86%	80%
Student 44	50%	78%	100%	90%	86%	83%
Student 45	70%	63%	66%	66%	48%	62%
Mean	69%	80%	81%	82%	77%	79%
Standard deviation	13%	11%	22%	20%	9%	10%

Post-test - Control Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 1	97%	89%	100%	89%	76%	89%
Student 2	97%	95%	93%	93%	86%	93%
Student 3	100%	85%	100%	83%	86%	89%
Student 4	64%	89%	93%	86%	76%	85%
Student 5	93%	77%	100%	86%	67%	82%
Student 6	100%	97%	86%	86%	71%	89%
Student 7	100%	96%	100%	93%	81%	94%
Student 8	93%	77%	100%	73%	86%	83%
Student 9	95%	95%	100%	96%	90%	95%
Student 10	100%	100%	93%	100%	86%	96%
Student 11	75%	76%	100%	86%	90%	84%
Student 12	100%	93%	100%	96%	90%	95%
Student 13	100%	93%	100%	80%	76%	90%
Student 14	82%	96%	100%	96%	86%	94%
Student 15	100%	89%	93%	89%	86%	90%
Student 16	100%	93%	86%	93%	67%	88%
Student 17	97%	98%	100%	83%	76%	92%
Student 18	97%	100%	80%	86%	86%	92%
Student 19	73%	81%	93%	80%	76%	81%
Student 20	91%	78%	100%	100%	86%	88%
Student 21	88%	86%	100%	90%	86%	89%
Student 22	100%	98%	100%	93%	86%	96%
Student 23	79%	82%	93%	73%	86%	83%
Student 24	100%	93%	100%	86%	95%	94%
Student 25	84%	55%	100%	84%	86%	75%
Student 26	80%	84%	73%	83%	67%	79%
Student 27	91%	96%	80%	93%	81%	90%
Student 28	82%	86%	53%	49%	76%	72%
Student 29	84%	93%	100%	100%	95%	95%
Student 30	95%	98%	100%	96%	95%	97%
Student 31	82%	81%	100%	90%	67%	83%
Student 32	84%	86%	73%	83%	86%	83%

Student 33	73%	86%	73%	86%	90%	83%
Student 34	71%	73%	93%	80%	76%	78%
Student 35	64%	82%	100%	90%	76%	84%
Student 36	93%	100%	100%	96%	86%	96%
Student 37	86%	96%	100%	96%	76%	93%
Student 38	77%	85%	100%	86%	86%	87%
Student 39	88%	96%	100%	100%	95%	97%
Student 40	68%	89%	100%	93%	81%	88%
Student 41	73%	84%	93%	93%	90%	87%
Student 42	46%	69%	53%	93%	52%	66%
Student 43	86%	88%	100%	86%	76%	88%
Student 44	68%	89%	93%	83%	67%	83%
Student 45	86%	85%	80%	93%	57%	81%
Mean	86%	88%	93%	88%	81%	87%
Standard deviation	13%	9%	12%	9%	10%	7%

Pre-test - Experimental Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 1	80%	80%	73%	76%	76%	78%
Student 2	60%	83%	86%	90%	76%	82%
Student 3	70%	66%	73%	80%	76%	72%
Student 4	40%	53%	86%	96%	76%	68%
Student 5	90%	81%	73%	86%	76%	80%
Student 6	90%	78%	73%	76%	67%	76%
Student 7	60%	78%	59%	86%	86%	76%
Student 8	70%	73%	80%	86%	76%	77%
Student 9	70%	90%	93%	100%	86%	90%
Student 10	70%	58%	93%	96%	57%	71%
Student 11	70%	79%	80%	76%	67%	76%
Student 12	50%	75%	86%	86%	76%	77%
Student 13	60%	60%	60%	70%	67%	63%
Student 14	50%	86%	80%	96%	76%	82%
Student 15	100%	80%	66%	63%	57%	73%
Student 16	90%	98%	100%	93%	95%	96%
Student 17	80%	71%	53%	43%	76%	65%
Student 18	80%	78%	60%	86%	76%	76%
Student 19	90%	76%	86%	90%	76%	81%
Student 20	70%	74%	80%	86%	67%	75%
Student 21	70%	83%	66%	83%	67%	76%
Student 22	70%	78%	93%	93%	76%	82%
Student 23	60%	78%	80%	56%	48%	68%
Student 24	90%	70%	66%	90%	76%	75%
Student 25	90%	88%	100%	96%	86%	91%
Student 26	70%	93%	73%	73%	86%	83%
Student 27	80%	91%	60%	93%	86%	84%
Student 28	100%	100%	100%	96%	95%	99%
Student 29	70%	88%	86%	76%	76%	82%
Student 30	100%	100%	80%	86%	86%	92%
Student 31	90%	90%	93%	96%	86%	91%
Student 32	70%	75%	86%	86%	86%	80%

Student 33	90%	90%	93%	76%	67%	84%
Student 34	100%	93%	73%	93%	86%	89%
Student 35	60%	91%	80%	76%	76%	82%
Student 36	70%	81%	93%	86%	76%	82%
Student 37	80%	90%	80%	89%	86%	87%
Student 38	70%	83%	86%	89%	76%	82%
Student 39	90%	95%	100%	93%	67%	90%
Student 40	70%	80%	86%	83%	95%	83%
Student 41	70%	86%	86%	83%	76%	83%
Student 42	80%	91%	93%	80%	86%	88%
Student 43	80%	100%	100%	90%	95%	96%
Student 44	50%	85%	73%	83%	76%	78%
Student 45	100%	96%	93%	86%	76%	91%
Student 46	80%	95%	86%	89%	76%	88%
Student 47	40%	50%	60%	73%	86%	61%
Student 48	80%	85%	73%	86%	67%	80%
Student 49	50%	78%	86%	53%	67%	71%
Mean	75%	82%	81%	84%	77%	81%
Standard deviation	16%	12%	12%	12%	10%	9%

Post-test - Experimental Group

Name	Listening	Vocabulary	Reading	Translation	Writing	Total
Student 1	82%	88%	100%	79%	95%	89%
Student 2	82%	88%	93%	89%	86%	88%
Student 3	97%	89%	86%	93%	86%	89%
Student 4	95%	86%	86%	86%	71%	84%
Student 5	97%	89%	100%	83%	76%	88%
Student 6	91%	93%	93%	86%	76%	89%
Student 7	95%	80%	59%	89%	86%	80%
Student 8	91%	88%	73%	96%	81%	86%
Student 9	91%	85%	100%	96%	95%	92%
Student 10	82%	78%	79%	93%	76%	81%
Student 11	100%	78%	93%	96%	67%	83%
Student 12	91%	66%	93%	90%	86%	80%
Student 13	95%	98%	100%	96%	81%	95%
Student 14	100%	82%	100%	89%	76%	87%
Student 15	97%	88%	66%	83%	67%	81%
Student 16	100%	86%	100%	89%	95%	92%
Student 17	93%	89%	93%	89%	76%	88%
Student 18	95%	82%	93%	66%	95%	84%
Student 19	97%	96%	80%	96%	95%	93%
Student 20	97%	80%	80%	86%	67%	80%
Student 21	97%	89%	100%	86%	86%	90%
Student 22	100%	74%	93%	79%	76%	81%
Student 23	82%	76%	79%	76%	86%	79%
Student 24	86%	92%	93%	89%	57%	85%
Student 25	97%	92%	86%	100%	86%	92%
Student 26	95%	90%	100%	79%	90%	90%
Student 27	100%	94%	86%	100%	95%	94%
Student 28	97%	94%	100%	93%	86%	94%
Student 29	91%	90%	86%	90%	86%	89%
Student 30	100%	100%	93%	100%	95%	98%
Student 31	93%	90%	93%	93%	76%	89%
Student 32	86%	89%	93%	96%	81%	89%

Student 33	95%	96%	100%	96%	95%	96%
Student 34	95%	97%	100%	96%	95%	97%
Student 35	95%	93%	86%	96%	76%	90%
Student 36	91%	92%	100%	86%	81%	90%
Student 37	93%	90%	100%	83%	86%	90%
Student 38	86%	81%	80%	93%	67%	81%
Student 39	95%	94%	93%	93%	81%	92%
Student 40	75%	67%	86%	76%	57%	71%
Student 41	95%	93%	100%	86%	95%	94%
Student 42	93%	80%	100%	73%	76%	83%
Student 43	97%	77%	100%	100%	86%	88%
Student 44	91%	77%	93%	79%	81%	82%
Student 45	100%	97%	93%	100%	76%	94%
Student 46	86%	92%	93%	79%	76%	87%
Student 47	66%	61%	86%	56%	76%	67%
Student 48	91%	77%	100%	90%	57%	81%
Student 49	95%	88%	100%	100%	57%	87%
Mean	92%	86%	91%	88%	81%	87%
Standard deviation	7%	9%	10%	9%	11%	6%

Appendix 10: Statistical analysis of the results of pre-tests and post-tests in the experimental research - The Study Proper

Experimentální skupina - listening

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Ex_Listening & Posttest-Ex_Listening	47	22,50000	5,730239	0,000000

Experimentální skupina - vocabulary

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Ex_Vocabulary & Posttest-Ex_Vocabulary	46	327,5000	2,327105	0,019960

Experimentální skupina - reading

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Ex_Reading & Posttest-Ex_Reading	37	65,00000	4,322221	0,000015

Experimentální skupina - translation

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Ex_Translation & Posttest-Ex_Translation	46	335,5000	2,239702	0,025111

Experimentální skupina - writing

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Ex_Writing & Posttest-Ex_Writing	36	196,5000	2,144493	0,031994

Pretest – experimentální skupina - total

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Ex_Total & Posttest-Ex_Total	48	33,00000	5,692383	0,000000

Kontrolní skupina - listening

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Co_Listening & Posttest-Co_Listening	45	94,00000	4,780278	0,000002

Kontrolní skupina – vocabulary

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Co_Vocabulary & Posttest-Co_Vocabulary	41	143,0000	3,725528	0,000195

Kontrolní skupina – reading

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Co_Reading & Posttest-Co_Reading	36	74,50000	4,061184	0,000049

Kontrolní skupina – translation

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Co_Translation & Posttest-Co_Translation	39	218,0000	2,400260	0,016384

Kontrolní skupina - writing

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Co_Writing & Posttest-Co_Writing	36	184,0000	2,340876	0,019239

Kontrolní skupina - total

Dvojice proměnných	Wilcoxonův párový test (databaze) Označené testy jsou významné na hladině p <,05000			
	Počet platných	T	Z	p-hodn.
Pretest-Co_Total & Posttest-Co_Total	45	18,00000	5,638132	0,000000

Pretest – experimentální a kontrolní skupina

Listening

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000					
	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. Pretest-Ex
Listening	875,5000	1,714323	0,086470	1,775169	0,075871	49

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000	
	N platn. Pretest-Co	2*1str. přesné p
Listening	45	0,085802

Vocabulary

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000					
	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. Pretest-Ex
Vocabulary	1001,500	0,760660	0,446861	0,761905	0,446117	49

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000	
	N platn. Pretest-Co	2*1str. přesné p
Vocabulary	45	0,446380

Reading

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000					
	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. Pretest-Ex
Reading	940,5000	-1,22235	0,221575	-1,23801	0,215713	49

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000	
	N platn. Pretest-Co	2*1str. přesné p
Reading	45	0,221269

Translation

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000					
	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. Pretest-Ex
Translation	1082,500	-0,147591	0,882666	-0,148539	0,881917	49

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. pretest Označené testy jsou významné na hladině p <,05000	
	N platn. Pretest-Co	2*1str. přesné p
Translation	45	0,880252

Writing

Proměnná	Mann-Whitneyův U test (databaze)					
	Dle proměn. pretest					
	Označené testy jsou významné na hladině p <,05000					
	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. Pretest-Ex
Writing	1082,000	0,151375	0,879680	0,160174	0,872744	49

Proměnná	Mann-Whitneyův U test (databaze)	
	Dle proměn. pretest	
	Označené testy jsou významné na hladině p <,05000	
	N platn. Pretest-Co	2*1str. přesné p
Writing	45	0,880252

Total

Proměnná	Mann-Whitneyův U test (databaze)					
	Dle proměn. pretest					
	Označené testy jsou významné na hladině p <,05000					
	U	Z	p-hodn.	Z upravené	p-hodn.	N platn. Pretest-Ex
Total	1054,000	0,363300	0,716381	0,363365	0,716333	49

Proměnná	Mann-Whitneyův U test (databaze)	
	Dle proměn. pretest	
	Označené testy jsou významné na hladině p <,05000	
	N platn. Pretest-Co	2*1str. přesné p
Total	45	0,717634

Posttest – experimentální a kontrolní skupina

Listening

Proměnná	Mann-Whitneyův U test (databaze)				
	Dle proměn. posttest				
	Označené testy jsou významné na hladině p <,05000				
	U	Z	p-hodn.	Z upravené	p-hodn.
Listening	835,5000	2,017074	0,043689	2,030980	0,042258

Proměnná	Mann-Whitneyův U test (databaze)		
	Dle proměn. posttest		
	Označené testy jsou významné na hladině p <,05000		
	N platn. Posttest-Ex	N platn. Posttest-Co	2*1str. přesné p
Listening	49	45	0,042922

Vocabulary

Proměnná	Mann-Whitneyův U test (databaze)				
	Dle proměn. posttest				
	Označené testy jsou významné na hladině p <,05000				
	U	Z	p-hodn.	Z upravené	p-hodn.
Vocabulary	975,5000	-0,957448	0,338342	-0,959105	0,337506

Proměnná	Mann-Whitneyův U test (databaze)		
	Dle proměn. posttest		
	Označené testy jsou významné na hladině p <,05000		
	N platn. Posttest-Ex	N platn. Posttest-Co	2*1str. přesné p
Vocabulary	49	45	0,338060

Reading

Proměnná	Mann-Whitneyův U test (databaze)				
	Dle proměn. posttest				
	Označené testy jsou významné na hladině p <,05000				
	U	Z	p-hodn.	Z upravené	p-hodn.
Reading	902,5000	-1,50997	0,131053	-1,61024	0,107347

Proměnná	Mann-Whitneyův U test (databaze)		
	Dle proměn. posttest		
	Označené testy jsou významné na hladině p <,05000		
	N platn. Posttest-Ex	N platn. Posttest-Co	2*1str. přesné p
Reading	49	45	0,130534

Translation

Proměnná	Mann-Whitneyův U test (databaze)				
	Dle proměn. posttest				
	Označené testy jsou významné na hladině p <,05000				
	U	Z	p-hodn.	Z upravené	p-hodn.
Translation	1067,000	0,264906	0,791082	0,266917	0,789533

Proměnná	Mann-Whitneyův U test (databaze)		
	Dle proměn. posttest		
	Označené testy jsou významné na hladině p <,05000		
	N platn. Posttest-Ex	N platn. Posttest-Co	2*1str. přesné p
Translation	49	45	0,792044

Writing

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. posttest Označené testy jsou významné na hladině p <,05000				
	U	Z	p-hodn.	Z upravené	p-hodn.
Writing	1086,500	-0,117316	0,906610	-0,119695	0,904725

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. posttest Označené testy jsou významné na hladině p <,05000		
	N platn. Posttest-Ex	N platn. Posttest-Co	2*1str. přesné p
Writing	49	45	0,904072

Total

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. posttest Označené testy jsou významné na hladině p <,05000				
	U	Z	p-hodn.	Z upravené	p-hodn.
Total	1072,500	0,223278	0,823319	0,223306	0,823298

Proměnná	Mann-Whitneyův U test (databaze) Dle proměn. posttest Označené testy jsou významné na hladině p <,05000		
	N platn. Posttest-Ex	N platn. Posttest-Co	2*1str. přesné p
Total	49	45	0,821213

Appendix 11: Reliability statistics of pre-tests and post-tests – The Study Proper

Proměnné, u kterých je Cronbachova alpha počítána - PretestEx_Listening PretestEx_Vocabulary PretestEx_Reading PretestEx_Translation PretestEx_Writing PretestEx_Total

Reliability

Case Processing Summary

		N	%
Cases	Valid	49	100,0
	Excluded[a]	0	,0
	Total	49	100,0

Hodnota alphy naznačuje vysokou konzistenci a reliabilitu.

Reliability Statistics

Cronbach's Alpha	N of Items
,752	6

ANOVA with Cochran's Test

	Sum of Squares	df	Mean Square	Cochran's Q
Between People	43675,374	48	909,904	
Within People Between Items	3039523,619	5	607904,724	240,712
Within People Residual	54144,381	240	225,602	
Within People Total	3093668,000	245	12627,216	
Total	3137343,374	293	10707,657	

ANOVA with Cochran's Test

		Sig
Between People		
	Between Items	,000
Within People	Residual	
	Total	
Total		

Grand Mean = 109,75

Sestavený model je statistiky průkazný -

Proměnné, u kterých je Cronbachova alpha počítána - PosttestEx_Listening PosttestEx_Vocabulary PosttestEx_Reading PosttestEx_Translation PosttestEx_Writing PosttestEx_Total

Case Processing Summary

		N	%
	Valid	49	100,0
Cases	Excluded[a]	0	,0
	Total	49	100,0

Reliability Statistics

Cronbach's Alpha	N of Items
,746	6

ANOVA with Cochran's Test

		Sum of Squares	df	Mean Square	Cochran's Q
Between People		18730,993	48	390,229	
	Between Items	3782249,918	5	756449,984	243,469
Within People	Residual	23791,415	240	99,131	
	Total	3806041,333	245	15534,863	
Total		3824772,327	293	13053,830	

ANOVA with Cochran's Test

		Sig
Between People		
	Between Items	,000
Within People	Residual	
	Total	
Total		

Grand Mean = 122,37

Proměnné, u kterých je Cronbachova alpha počítána - PretestCo_Listening PretestCo_Vocabulary PretestCo_Reading PretestCo_Translation PretestCo_Writing PretestCo_Total

Case Processing Summary

		N	%
	Valid	45	91,8
Cases	Excluded[a]	4	8,2
	Total	49	100,0

Reliability Statistics

Cronbach's Alpha	N of Items
,745	6

ANOVA with Cochran's Test

		Sum of Squares	df	Mean Square	Cochran's Q
Between People		67025,719	44	1523,312	
	Between Items	2641259,674	5	528251,935	217,958
Within People	Residual	85334,326	220	387,883	
	Total	2726594,000	225	12118,196	
Total		2793619,719	269	10385,203	

ANOVA with Cochran's Test

		Sig
Between People		
	Between Items	,000
Within People	Residual	
	Total	
Total		

Grand Mean = 106,73

Proměnné, u kterých je Cronbachova alpha počítána - PosttestCo_Listening PosttestCo_Vocabulary PosttestCo_Reading PosttestCo_Translation PosttestCo_Writing PosttestCo_Total

Case Processing Summary

		N	%
	Valid	45	91,8
Cases	Excluded[a]	4	8,2
	Total	49	100,0

Reliability Statistics

Cronbach's Alpha	N of Items
,749	6

ANOVA with Cochran's Test

	Sum of Squares	df	Mean Square	Cochran's Q
Between People	27471,207	44	624,346	
Between Items	3406868,874	5	681373,775	222,747
Within People Residual	34466,459	220	156,666	
Total	3441335,333	225	15294,824	
Total	3468806,541	269	12895,192	

ANOVA with Cochran's Test

		Sig
Between People		
	Between Items	,000
Within People	Residual	
	Total	
Total		

Grand Mean = 121,21

Appendix 12: Questionnaire – research: The Study Proper

Dotazník

Katedra jazyků, PEF, ČZU v Praze – prosinec 2013

Milí studenti, prosím o vyplnění následujícího dotazníku vztahujícímu se k e-learningové výuce Obchodní angličtiny (AO). Správnou odpověď prosím zakroužkujte.

1. Pohlaví: a) muž   b) žena

2. Obor studia: a) PAE   b) PAA   c) OPT   d) jiný

3. Ročník: a) první   b) druhý   c) třetí

4. Účast na e-learningovém online kurzu Obchodní angličtiny: a) ano   b) ne

5. Myslíte si, že zařazení e-learningového online kurzu odborného anglického jazyka (AO) v rámci distančního studia je?
   b) vhodné   b) nevhodné   c) nevím

6. Myslíte si, že výuka anglického odborného jazyka (AO) v rámci e-learningového online kurzu (s vyloučením řečové dovednosti mluvení) může být stejně efektivní jako přímá výuka s učitelem - face-to-face? (Stejnou efektivitou chápeme, že výsledky testů studentů učících se metodou e-learningu a metodou face-to-face budou po absolvování kurzu relativně stejné, tzn. ze statistického hlediska nebudou existovat statisticky významné rozdíly mezi oběma skupinami).
   f) ano
   g) spíše ano
   h) spíše ne
   i) ne
   j) nevím

7. Myslíte si, že rozvoj řečové dovednosti **čtení s porozuměním** v rámci e-learningového online kurzu může být stejně efektivní jako při výuce face-to-face?

f) ano

g) spíše ano

h) spíše ne

i) ne

j) nevím

8. Myslíte si, že rozvoj řečové dovednosti **poslechu s porozuměním** v rámci e-learningového online kurzu může být stejně efektivní jako při výuce face-to-face?

f) ano

g) spíše ano

h) spíše ne

i) ne

j) nevím

9. Myslíte si, že rozvoj řečové dovednosti **písemného projevu** v rámci e-learningového online kurzu může být stejně efektivní jako při výuce face-to-face?

f) ano

g) spíše ano

h) spíše ne

i) ne

j) nevím

10. Myslíte si, že rozvoj řečové dovednosti **překladu** v rámci e-learningového online kurzu může být stejně efektivní jako při výuce face-to-face?

f) ano

g) spíše ano

h) spíše ne

i) ne

j) nevím

11. Myslíte si, že rozvoj **slovní zásoby** v rámci e-learningového online kurzu může být stejně efektivní jako při výuce face-to-face?

f) ano

g) spíše ano

h) spíše ne

i) ne

j) nevím

Pokud jste absolvovali e-learningový online kurz Obchodní angličtiny, prosím o jakýkoliv komentář ke kurzu ohledně jeho vylepšení s cílem jeho použití pro samostudium a distanční studium. (Např. jestli něco, podle vašeho názoru, v jednotlivých lekcích chybělo nebo naopak bylo zbytečné, které typy cvičení vás nejvíce zaujaly, jestli byla pro vás výuka pomocí e-learningu více motivující, v čem vám tato metoda výuky vyhovovala a v čem nevyhovovala atd.)

12. Komentář:

Děkuji za spolupráci,
Lenka Kučírková

Appendix 13: Statistical Results of Questionnaires – The Study Proper

Byli odstraněni ti respondenti, u kterých byla zjištěna alespoň jedna 0.

Kategorie	Tabulka četností:Polož.č.1 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	51	51	58,62069	58,6207
b	36	87	41,37931	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.2 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
d	28	28	32,18391	32,1839
b	23	51	26,43678	58,6207
c	17	68	19,54023	78,1609
a	19	87	21,83908	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.3 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
b	7	7	8,04598	8,0460
a	68	75	78,16092	86,2069
c	12	87	13,79310	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.4 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	47	47	54,02299	54,0230
b	40	87	45,97701	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.5 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	71	71	81,60920	81,6092
c	13	84	14,94253	96,5517
b	3	87	3,44828	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.6 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
b	38	38	43,67816	43,6782
a	6	44	6,89655	50,5747
c	31	75	35,63218	86,2069
d	11	86	12,64368	98,8506
e	1	87	1,14943	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.7 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
b	34	34	39,08046	39,0805
c	31	65	35,63218	74,7126
a	11	76	12,64368	87,3563
d	10	86	11,49425	98,8506
e	1	87	1,14943	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.8 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
c	15	15	17,24138	17,2414
a	22	37	25,28736	42,5287
b	38	75	43,67816	86,2069
d	9	84	10,34483	96,5517
e	3	87	3,44828	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.9 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	24	24	27,58621	27,5862
c	10	34	11,49425	39,0805
b	44	78	50,57471	89,6552
d	5	83	5,74713	95,4023
e	4	87	4,59770	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.10 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
a	28	28	32,18391	32,1839
c	17	45	19,54023	51,7241
b	33	78	37,93103	89,6552
d	7	85	8,04598	97,7011
e	2	87	2,29885	100,0000
ChD	0	87	0,00000	100,0000

Kategorie	Tabulka četností:Polož.č.11 (Výsledkydotazníresearch)			
	Četnost	Kumulativní četnost	Rel.četnost	Kumulativní rel.četnost
c	17	17	19,54023	19,5402
a	36	53	41,37931	60,9195
b	24	77	27,58621	88,5057
d	4	81	4,59770	93,1034
e	6	87	6,89655	100,0000
ChD	0	87	0,00000	100,0000

Analýza kvalitativních znaků – v závislosti na pohlaví

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 c	Polož.č.5 b	Řádk. součty
a	40	9	2	51
b	31	4	1	36
Celk.	71	13	3	87

Tabulka s testy

Statist.	Statist. : Polož.č.1(2) x Polož.č.5(3) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	,8358967	df=2	p=,65840
M-V chí-kvadr.	,8580840	df=2	p=,65113
Fí	,0980204		
Kontingenční koeficient	,0975529		
Cramér. V	,0980204		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.6 b	Polož.č.6 a	Polož.č.6 c	Polož.č.6 d	Polož.č.6 e	Řádk. součty
a	21	2	20	8	0	51
b	17	4	11	3	1	36
Celk.	38	6	31	11	1	87

Statist.	Statist. : Polož.č.1(2) x Polož.č.6(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	4,521553	df=4	p=,34000
M-V chí-kvadr.	4,897735	df=4	p=,29795
Fí	,2279734		
Kontingenční koeficient	,2222707		
Cramér. V	,2279734		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.7 b	Polož.č.7 c	Polož.č.7 a	Polož.č.7 d	Polož.č.7 e	Řádk. součty
a	18	20	5	7	1	51
b	16	11	6	3	0	36
Celk.	34	31	11	10	1	87

Statist.	Statist. : Polož.č.1(2) x Polož.č.7(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	2,922117	df=4	p=,57094
M-V chí-kvadr.	3,292432	df=4	p=,51013
Fí	,1832691		
Kontingenční koeficient	,1802667		
Cramér. V	,1832691		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.8 c	Polož.č.8 a	Polož.č.8 b	Polož.č.8 d	Polož.č.8 e	Řádk. součty
a	13	11	22	4	1	51
b	2	11	16	5	2	36
Celk.	15	22	38	9	3	87

Statist.	Statist. : Polož.č.1(2) x Polož.č.8(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	7,082820	df=4	p=,13158
M-V chí-kvadr.	7,817490	df=4	p=,09850
Fí	,2853274		
Kontingenční koeficient	,2743772		
Cramér. V	,2853274		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 d	Polož.č.9 e	Řádk. součty
a	15	6	22	5	3	51
b	9	4	22	0	1	36
Celk.	24	10	44	5	4	87

Statist.	Statist. : Polož.č.1(2) x Polož.č.9(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,476593	df=4	p=,24179
M-V chí-kvadr.	7,297533	df=4	p=,12098
Fí	,2508971		
Kontingenční koeficient	,2433545		
Cramér. V	,2508971		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.10 a	Polož.č.10 c	Polož.č.10 b	Polož.č.10 d	Polož.č.10 e	Řádk. součty
a	14	10	21	4	2	51
b	14	7	12	3	0	36
Celk.	28	17	33	7	2	87

Statist.	Statist. : Polož.č.1(2) x Polož.č.10(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	2,618445	df=4	p=,62356
M-V chí-kvadr.	3,334872	df=4	p=,50343
Fí	,1734851		
Kontingenční koeficient	,1709319		
Cramér. V	,1734851		

Polož.č.1	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.11 c	Polož.č.11 a	Polož.č.11 b	Polož.č.11 d	Polož.č.11 e	Řádk. součty
a	8	17	17	4	5	51
b	9	19	7	0	1	36
Celk.	17	36	24	4	6	87

Statist.	Statist. : Polož.č.1(2) x Polož.č.11(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	8,674936	df=4	p=,06976
M-V chí-kvadr.	10,32354	df=4	p=,03532
Fí	,3157719		
Kontingenční koeficient	,3011162		
Cramér. V	,3157719		

Analýza kvalitativních znaků – v závislosti na oboru studia

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 c	Polož.č.5 b	Řádk. součty
d	22	6	0	28
b	19	3	1	23
c	13	2	2	17
a	17	2	0	19
Celk.	71	13	3	87

Statist.	Statist. : Polož.č.2(4) x Polož.č.5(3) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	6,524570	df=6	p=,36706
M-V chí-kvadr.	6,756032	df=6	p=,34400
Fí	,2738523		
Kontingenční koeficient	,2641272		
Cramér. V	,1936428		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.6 b	Polož.č.6 a	Polož.č.6 c	Polož.č.6 d	Polož.č.6 e	Řádk. součty
d	11	2	10	4	1	28
b	9	2	9	3	0	23
c	8	1	6	2	0	17
a	10	1	6	2	0	19
Celk.	38	6	31	11	1	87

Statist.	Statist. : Polož.č.2(4) x Polož.č.6(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	3,249762	df=12	p=,99351
M-V chí-kvadr.	3,398187	df=12	p=,99202
Fí	,1932708		
Kontingenční koeficient	,1897592		
Cramér. V	,1115849		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.7 b	Polož.č.7 c	Polož.č.7 a	Polož.č.7 d	Polož.č.7 e	Řádk. součty
d	11	12	1	3	1	28
b	8	8	4	3	0	23
c	7	5	3	2	0	17
a	8	6	3	2	0	19
Celk.	34	31	11	10	1	87

Statist.	Statist. : Polož.č.2(4) x Polož.č.7(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,764242	df=12	p=,92750
M-V chí-kvadr.	6,553883	df=12	p=,88563
Fí	,2574017		
Kontingenční koeficient	,2492762		
Cramér. V	,1486110		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.8 c	Polož.č.8 a	Polož.č.8 b	Polož.č.8 d	Polož.č.8 e	Řádk. součty
d	5	7	13	1	2	28
b	3	6	9	4	1	23
c	4	3	9	1	0	17
a	3	6	7	3	0	19
Celk.	15	22	38	9	3	87

Statist.	Statist. : Polož.č.2(4) x Polož.č.8(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	7,666728	df=12	p=,81060
M-V chí-kvadr.	8,859105	df=12	p=,71492
Fí	,2968557		
Kontingenční koeficient	,2845813		
Cramér. V	,1713897		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 d	Polož.č.9 e	Řádk. součty
d	8	4	14	1	1	28
b	8	2	11	2	0	23
c	4	2	8	1	2	17
a	4	2	11	1	1	19
Celk.	24	10	44	5	4	87

Statist.	Statist. : Polož.č.2(4) x Polož.č.9(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,105219	df=12	p=,95437
M-V chí-kvadr.	5,570383	df=12	p=,93617
Fí	,2422410		
Kontingenční koeficient	,2354318		
Cramér. V	,1398579		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.10 a	Polož.č.10 c	Polož.č.10 b	Polož.č.10 d	Polož.č.10 e	Řádk. součty
d	8	2	15	2	1	28
b	7	7	5	4	0	23
c	5	5	6	0	1	17
a	8	3	7	1	0	19
Celk.	28	17	33	7	2	87

Statist.	Statist. : Polož.č.2(4) x Polož.č.10(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	14,96172	df=12	p=,24354
M-V chí-kvadr.	16,81967	df=12	p=,15651
Fí	,4146972		
Kontingenční koeficient	,3830647		
Cramér. V	,2394255		

Polož.č.2	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.11 c	Polož.č.11 a	Polož.č.11 b	Polož.č.11 d	Polož.č.11 e	Řádk. součty
d	8	7	9	2	2	28
b	1	13	7	0	2	23
c	2	6	5	2	2	17
a	6	10	3	0	0	19
Celk.	17	36	24	4	6	87

Statist.	Statist. : Polož.č.2(4) x Polož.č.11(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	17,13123	df=12	p=,14473
M-V chí-kvadr.	20,90401	df=12	p=,05180
Fí	,4437462		
Kontingenční koeficient	,4056055		
Cramér. V	,2561970		

Analýza kvalitativních znaků – v závislosti na absolvování kurzu

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 c	Polož.č.5 b	Řádk. součty
a	42	3	2	47
b	29	10	1	40
Celk.	71	13	3	87

Statist.	Statist. : Polož.č.4(2) x Polož.č.5(3) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,958200	df=2	p=,05084
M-V chí-kvadr.	6,146253	df=2	p=,04628
Fí	,2616965		
Kontingenční koeficient	,2531708		
Cramér. V	,2616965		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.6 b	Polož.č.6 a	Polož.č.6 c	Polož.č.6 d	Polož.č.6 e	Řádk. součty
a	27	2	12	5	1	47
b	11	4	19	6	0	40
Celk.	38	6	31	11	1	87

Statist.	Statist. : Polož.č.4(2) x Polož.č.6(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	9,573823	df=4	p=,04825
M-V chí-kvadr.	10,13898	df=4	p=,03815
Fí	,3317287		
Kontingenční koeficient	,3148567		
Cramér. V	,3317287		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.7 b	Polož.č.7 c	Polož.č.7 a	Polož.č.7 d	Polož.č.7 e	Řádk. součty
a	24	14	5	4	0	47
b	10	17	6	6	1	40
Celk.	34	31	11	10	1	87

Statist.	Statist. : Polož.č.4(2) x Polož.č.7(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	7,028218	df=4	p=,13440
M-V chí-kvadr.	7,546767	df=4	p=,10966
Fí	,2842255		
Kontingenční koeficient	,2733968		
Cramér. V	,2842255		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.8 c	Polož.č.8 a	Polož.č.8 b	Polož.č.8 d	Polož.č.8 e	Řádk. součty
a	7	9	25	5	1	47
b	8	13	13	4	2	40
Celk.	15	22	38	9	3	87

Statist.	Statist. : Polož.č.4(2) x Polož.č.8(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	4,493731	df=4	p=,34329
M-V chí-kvadr.	4,540473	df=4	p=,33778
Fí	,2272709		
Kontingenční koeficient	,2216194		
Cramér. V	,2272709		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 d	Polož.č.9 e	Řádk. součty
a	14	6	25	2	0	47
b	10	4	19	3	4	40
Celk.	24	10	44	5	4	87

Statist.	Statist. : Polož.č.4(2) x Polož.č.9(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,557609	df=4	p=,23471
M-V chí-kvadr.	7,075940	df=4	p=,13193
Fí	,2527460		
Kontingenční koeficient	,2450405		
Cramér. V	,2527460		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.10 a	Polož.č.10 c	Polož.č.10 b	Polož.č.10 d	Polož.č.10 e	Řádk. součty
a	18	9	17	3	0	47
b	10	8	16	4	2	40
Celk.	28	17	33	7	2	87

Statist.	Statist. : Polož.č.4(2) x Polož.č.10(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	3,980247	df=4	p=,40869
M-V chí-kvadr.	4,759148	df=4	p=,31291
Fí	,2138924		
Kontingenční koeficient	,2091614		
Cramér. V	,2138924		

Polož.č.4	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.11 c	Polož.č.11 a	Polož.č.11 b	Polož.č.11 d	Polož.č.11 e	Řádk. součty
a	10	18	13	3	3	47
b	7	18	11	1	3	40
Celk.	17	36	24	4	6	87

Statist.	Statist. : Polož.č.4(2) x Polož.č.11(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	1,140242	df=4	p=,88784
M-V chí-kvadr.	1,181723	df=4	p=,88110
Fí	,1144824		
Kontingenční koeficient	,1137395		
Cramér. V	,1144824		

Závislosti na ročníku studia

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10			
	Polož.č.5 a	Polož.č.5 c	Polož.č.5 b	Řádk. součty
b	6	1	0	7
a	57	10	1	68
c	8	2	2	12
Celk.	71	13	3	87

Statist.	Statist. : Polož.č.3(3) x Polož.č.5(3) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	7,505205	df=4	p=,11148
M-V chí-kvadr.	5,030466	df=4	p=,28419
Fí	,2937120		
Kontingenční koeficient	,2818080		
Cramér. V	,2076857		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.6 b	Polož.č.6 a	Polož.č.6 c	Polož.č.6 d	Polož.č.6 e	Řádk. součty
b	4	0	2	1	0	7
a	29	6	24	8	1	68
c	5	0	5	2	0	12
Celk.	38	6	31	11	1	87

Statist.	Statist. : Polož.č.3(3) x Polož.č.6(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	2,706945	df=8	p=,95138
M-V chí-kvadr.	4,162109	df=8	p=,84221
Fí	,1763925		
Kontingenční koeficient	,1737107		
Cramér. V	,1247283		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.7 b	Polož.č.7 c	Polož.č.7 a	Polož.č.7 d	Polož.č.7 e	Řádk. součty
b	2	3	1	1	0	7
a	26	25	9	7	1	68
c	6	3	1	2	0	12
Celk.	34	31	11	10	1	87

C

Statist.	Statist. : Polož.č.3(3) x Polož.č.7(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	1,985568	df=8	p=,98145
M-V chí-kvadr.	2,216577	df=8	p=,97364
Fí	,1510716		
Kontingenční koeficient	,1493766		
Cramér. V	,1068237		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.8 c	Polož.č.8 a	Polož.č.8 b	Polož.č.8 d	Polož.č.8 e	Řádk. součty
b	1	1	4	1	0	7
a	10	20	28	7	3	68
c	4	1	6	1	0	12
Celk.	15	22	38	9	3	87

Statist.	Statist. : Polož.č.3(3) x Polož.č.8(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,736047	df=8	p=,67677
M-V chí-kvadr.	6,489510	df=8	p=,59257
Fí	,2567714		
Kontingenční koeficient	,2487036		
Cramér. V	,1815648		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.9 a	Polož.č.9 c	Polož.č.9 b	Polož.č.9 d	Polož.č.9 e	Řádk. součty
b	4	1	2	0	0	7
a	18	8	35	4	3	68
c	2	1	7	1	1	12
Celk.	24	10	44	5	4	87

Statist.	Statist. : Polož.č.3(3) x Polož.č.9(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	4,981214	df=8	p=,75958
M-V chí-kvadr.	5,301871	df=8	p=,72488
Fí	,2392808		
Kontingenční koeficient	,2327116		
Cramér. V	,1691971		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.10 a	Polož.č.10 c	Polož.č.10 b	Polož.č.10 d	Polož.č.10 e	Řádk. součty
b	2	2	2	1	0	7
a	24	12	25	6	1	68
c	2	3	6	0	1	12
Celk.	28	17	33	7	2	87

Statist.	Statist. : Polož.č.3(3) x Polož.č.10(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	5,997443	df=8	p=,64752
M-V chí-kvadr.	6,429317	df=8	p=,59926
Fí	,2625569		
Kontingenční koeficient	,2539496		
Cramér. V	,1856558		

Polož.č.3	2-rozměrná tabulka: Pozorované četnosti (Výsledkydotazníresearch) Četnost označených buněk > 10					
	Polož.č.11 c	Polož.č.11 a	Polož.č.11 b	Polož.č.11 d	Polož.č.11 e	Řádk. součty
b	3	2	2	0	0	7
a	13	31	18	2	4	68
c	1	3	4	2	2	12
Celk.	17	36	24	4	6	87

Statist.	Statist. : Polož.č.3(3) x Polož.č.11(5) (Výsledkydotazníresearch)		
	Chí-kvadr.	sv	p
Pearsonův chí-kv.	11,02313	df=8	p=,20039
M-V chí-kvadr.	9,730067	df=8	p=,28449
Fí	,3559532		
Kontingenční koeficient	,3353422		
Cramér. V	,2516969		

Appendix 14: Results ot the Questionnaire – The Study Proper

	Polož. č. 1	Polož. č. 2	Polož č. 3	Polož. č. 4	Polož č. 5	Polož. č. 6	Polož. č. 7	Polož. č. 8	Polož. č. 9	Polož č. 10	Polož. č. 11
Dot.č.1	a	d	b	a	a	b	b	c	a	a	c
Dot.č.2	b	d	a	a	a	b	b	a	c	a	a
Dot.č.3	b	b	a	a	a	a	b	b	a	c	a
Dot.č.4	a	b	a	a	a	b	c	b	a	c	a
Dot.č.5	a	d	a	a	a	c	c	c	b	b	b
Dot.č.6	a	b	a	a	a	b	b	b	b	c	a
Dot.č.7	b	d	0	a	a	b	b	a	a	a	a
Dot.č.8	b	d	a	a	a	a	a	a	c	b	a
Dot.č.9	a	d	a	a	a	b	c	b	b	b	b
Dot.č.10	a	c	a	a	a	b	c	b	a	a	c
Dot.č.11	b	d	a	a	a	d	c	a	b	a	c
Dot.č.12	a	d	a	a	c	c	c	b	c	c	c
Dot.č.13	b	d	a	a	a	c	b	b	b	c	c
Dot.č.14	b	d	a	a	a	b	b	b	b	b	c
Dot.č.15	b	d	a	a	a	e	b	a	a	a	a
Dot.č.16	b	b	a	a	a	c	a	b	b	d	b
Dot.č.17	b	b	a	a	a	b	a	b	b	a	b
Dot.č.18	b	d	b	a	a	b	c	b	b	b	a
Dot.č.19	a	d	a	a	a	b	c	c	a	b	b
Dot.č.20	a	b	a	a	a	b	b	a	a	b	a
Dot.č.21	a	d	a	a	a	c	b	c	b	b	c
Dot.č.22	a	c	b	a	a	c	c	b	c	c	b
Dot.č.23	b	b	a	a	c	c	d	d	b	a	a
Dot.č.24	b	b	a	a	a	b	b	d	a	a	a
Dot.č.25	b	d	a	a	a	b	b	a	a	a	b
Dot.č.26	a	d	a	a	a	d	c	b	c	d	d
Dot.č.27	b	d	a	a	a	b	b	a	b	b	e
Dot.č.28	a	a	b	a	a	b	b	b	a	a	a
Dot.č.29	a	a	a	a	a	c	c	d	b	d	a

Dot.č.30	a	a	a	a	a	d	d	d	c	b	b
Dot.č.31	a	c	c	a	a	d	d	d	b	c	d
Dot.č.32	a	a	a	a	a	b	c	b	b	b	c
Dot.č.33	a	c	c	a	0	d	c	b	a	b	d
Dot.č.34	b	b	a	a	a	b	b	e	b	b	b
Dot.č.35	a	b	a	a	a	c	b	b	b	a	e
Dot.č.36	a	a	a	a	a	b	a	a	a	a	a
Dot.č.37	a	a	a	a	a	b	b	b	d	a	a
Dot.č.38	b	a	a	a	a	b	b	b	b	a	a
Dot.č.39	a	a	a	a	a	c	b	c	a	a	a
Dot.č.40	a	c	c	a	a	b	b	c	b	c	b
Dot.č.41	a	c	c	a	a	b	b	b	a	b	a
Dot.č.42	a	c	c	a	a	b	b	b	a	a	a
Dot.č.43	a	d	a	a	c	b	b	b	b	a	b
Dot.č.44	a	c	c	a	a	b	b	b	b	b	b
Dot.č.45	a	c	c	a	b	c	c	b	b	c	b
Dot.č.46	a	c	c	a	a	b	a	a	b	a	e
Dot.č.47	a	c	c	a	a	c	c	b	d	b	d
Dot.č.48	a	c	c	a	b	d	d	c	b	b	c
Dot.č.49	b	a	a	a	a	b	b	b	b	b	c
Dot.č.50	a	c	c	b	c	c	b	c	e	e	e
Dot.č.51	b	a	a	b	a	b	b	b	b	b	c
Dot.č.52	a	a	a	b	a	a	a	a	b	b	a
Dot.č.53	a	a	a	b	a	c	c	c	b	b	b
Dot.č.54	0	b	0	b	a	d	d	d	d	d	a
Dot.č.55	a	a	a	b	c	c	c	a	e	a	c
Dot.č.56	a	c	a	b	a	b	a	a	e	c	a
Dot.č.57	a	a	a	b	a	d	c	c	b	a	a
Dot.č.58	b	c	a	b	a	a	a	a	a	a	a
Dot.č.59	a	d	a	b	a	b	b	b	b	b	b
Dot.č.60	b	a	a	b	c	c	b	b	b	c	c
Dot.č.61	b	d	0	b	a	c	a	a	b	d	d
Dot.č.62	a	d	a	b	c	c	d	c	d	e	b
Dot.č.63	b	b	a	b	a	b	a	b	b	c	a

Dot.č.64	b	b	a	b	a	b	c	a	b	a	a
Dot.č.65	b	c	a	b	a	b	b	b	b	a	a
Dot.č.66	a	c	0	b	a	c	e	a	a	a	b
Dot.č.67	b	b	a	b	b	d	c	b	c	d	b
Dot.č.68	a	a	a	b	a	b	a	a	a	a	b
Dot.č.69	a	d	b	b	a	b	c	b	a	b	c
Dot.č.70	a	d	a	b	a	d	d	b	a	b	d
Dot.č.71	a	d	b	b	c	d	d	d	b	d	b
Dot.č.72	b	d	a	b	c	c	c	e	e	a	c
Dot.č.73	b	a	a	b	a	c	c	d	b	c	c
Dot.č.74	a	d	a	b	c	c	e	e	b	b	e
Dot.č.75	b	d	a	b	a	c	c	b	b	b	a
Dot.č.76	b	d	a	b	a	c	c	b	b	b	a
Dot.č.77	b	b	a	b	a	c	c	c	a	a	a
Dot.č.78	b	b	a	b	a	a	c	d	a	d	a
Dot.č.79	a	c	c	b	c	c	c	c	c	b	b
Dot.č.80	a	d	a	b	a	c	c	a	a	b	a
Dot.č.81	a	b	a	b	c	d	d	c	b	c	b
Dot.č.82	a	d	a	b	a	a	b	b	a	a	b
Dot.č.83	a	c	c	b	a	c	b	b	b	b	a
Dot.č.84	b	b	b	b	a	c	a	a	a	c	c
Dot.č.85	b	b	a	b	a	d	d	d	b	a	a
Dot.č.86	a	b	a	b	a	c	c	a	d	b	e
Dot.č.87	a	b	a	b	a	c	c	a	d	c	a
Dot.č.88	a	b	a	b	a	c	b	a	c	d	a
Dot.č.89	b	b	a	b	a	b	b	b	a	b	b
Dot.č.90	b	b	a	b	c	c	c	c	b	b	b
Dot.č.91	b	a	a	b	a	b	b	a	b	b	a
Dot.č.92	b	a	a	b	a	b	d	a	c	c	a
Dot.č.93	0	0	0	b	a	c	d	c	b	c	c
Dot.č.94	0	0	0	0	0	0	0	0	0	0	0

Appendix 15 Pre-test

A.   ?   True

B.   ?   False

7.   Younger people like large pieces of jewellery.

A.   ?   True

B.   ?   False

8.   He sells designs to companies in London.

A.   ?   True

B.   ?   False

9.   He has found pearls have brought him luck.

A.   ?   True

B.   ?   False

10.   John believes that people are more concerned about quality nowadays.

A.   ?   True

B.   ?   False

Jeweller:	I started in 1970, after I'd left a large company of which I was consultant.
Interviewer:	And what drew you to that profession in the first place?
Jeweller:	I suppose I'd always wanted to be a designer and this was the most practical way in which I could achieve those ends.
Interviewer:	And what exactly do you do now?
Jeweller:	I'm the Managing Director of a company called Cellini that produces high quality jewellery designs and produces it from the basic raw materials to the very finished product.
Interviewer:	And what sort of customers do you have in your shop?
Jeweller:	An enormous variety – because we make many of the items on commission so to a great extent the customers will decide the type of work that we will do.
Interviewer:	Do you have to be very rich?
Jeweller:	No, unfortunately not. We make very small items and we have the benefit that anybody can come in and we can produce any item in a very short space of time.
Interviewer:	And are there any special sorts of stones or metal you like working with?
Jeweller:	In the majority of cases we'll work with 18 carat gold and as far as the gem stones are concerned the only rules we'll lay down is that we use high quality stones.
Interviewer:	Do you find men and women have different tastes – er, do they like different kinds of things?
Jeweller:	Oh yes. Of course most men come in to buy something for someone special. They are looking for something that's expensive and looks it, too. They tend to go for simple settings in gold with diamonds – you know – em, heavy bracelets, necklaces and so on. Women, however, want pretty jewellery and they don't like to spend too much. They go for delicate settings with pretty coloured stones.
Interviewer:	Do you think the younger generation want something different from your older customers?
Jeweller:	Yes – they're much more daring. They're choosing large, chunky things at the moment with lots of gold or silver. It's the total effect they want – a bright splash of gold in the ears or round their necks. It's very exciting producing different kinds of items – trying to find exactly what it is that suits our customers.
Interviewer:	And what other sorts of things do you specialize in?
Jeweller:	We are pearl dealers and we buy pearls from various parts of the world, mainly from Japan and China and we make up a series of designs both for selling to the public and also for other companies, mainly in London. These are again a specialist section of the business because we deal largely in the rarer and the rather unusual pearl.
Interviewer:	Isn't it true that pearls are supposed to be unlucky for some people?
Jeweller:	They may be unlucky for some people but they are fairly lucky for us because we have had an enormous demand over the past five years for pearls, and particularly the more rarer forms.
Interviewer:	So you think they are becoming increasingly fashionable?
Jeweller:	I think better quality things are becoming increasingly fashionable and whilst people will perhaps buy less they'll buy, in general, better.

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Angličtina obchodní - B1, Angličtina obchodní - zápočet - B1 - ZS 12/13 (ELX05E,05Z) (1213ZS/ELX05E,05Z)

Jste přihlášeni jako Kučírková Lenka (Odhlásit se)

Moodle ČZU (CULS) ▶ 1213ZS/ELX05E,05Z ▶ Testy Hot Potatoes ▶ Reading Comprehension - Multiple Choice

Upravit tuto činnost - Test Hot Potatoes

Reading Comprehension - Multiple Choice

Quiz

Show questions one by one

1.   1. In her job Diane Humphreys

   A.   [?]   is in charge of Dan-Air's air hostesses world-wide.

   B.   [?]   supervises all Manchester Airport staff.

   C.   [?]   helps with the appointment of Manchester's Dan-Air cabin staff.

   D.   [?]   looks after aircrews when they are in Manchester.

2.   2. In summer Dan-Air's hostesses usually work

   A.   [?]   completely variable hours each week.

   B.   [?]   alternate days on and off duty.

   C.   [?]   six days a week of 12-16 hours each.

   D.   [?]   relief days after night flights.

---

3.   3. When can air hostesses relax?

   A.   [?]   Before a flight takes off

   B.   [?]   When the plane is in the air

   C.   [?]   When the plane has landed

   D.   [?]   Never at all

4.   4. What does being on relief duty involve?

   A.   [?]   Staying at the airport for the day

   B.   [?]   Remaining near a telephone all the time

   C.   [?]   Telephoning the airport every one and half hours

   D.   [?]   Preparing for a night flight during the day

5.   5. According to the text, the job of an air hostess is

   A.   [?]   well paid.

   B.   [?]   glamorous.

   C.   [?]   tiring.

   D.   [?]   boring.

CX

Reading Comprehension - Text

Airline pilots have high social status and earn a great deal of money. Air hostesses have an uncertain status and earn little. For those recently qualified, the basic pay in some airlines is as little as 300 pounds a month, and there are always some who will describe them as "glorified waitresses in the sky". This is little to balance against the possibility of a hijack or a disaster. So why do they do it?

I went to see Diane Humphreys, Senior Hostess with Dan-Air at Manchester Airport, to try to find the answer to this question. Mrs Humphreys is responsible for all Dan-Air's cabin staff based at the airport and is also involved in their selection. She has had the job for 16 years. Before that she was an ordinary air hostess for six years.

One reason why air hostesses don't get over-anxious about flying may be that they're so busy, before, during and after a flight. I asked Mrs Humphreys to tell me what a typical summer timetable for a hostess would be. She said that four or five flights a week during the summer is not uncommon.

On a Monday morning, a hostess might have an early morning flight, perhaps at 7 a.m. She has to check in 1 hour and a half before the flight – maybe at half past five – that might mean leaving home at 4 a.m. Before the flight, hostesses have to prepare the cabin and toilets and make sure that the food and drinks are aboard. Dan-Air don't do long-distance flights, just short or medium distance ones, and so there are no overnight stopovers unless weather conditions prevent take-off or landing, or the plane develops technical problems. There's a 45-minute turn-round interval, when the hostesses have to prepare the plane for the return flight. Depending on where you're flying, this can make it a 12-hour day; with delays it can even be 16 hours.

During the flight you've got no time to relax – the safety instructions have to be demonstrated and the food and drinks served. You're always busy. So one day you might have an early morning flight; the next an afternoon flight; the day after you might be on relief duty and have to be ready to work if someone else becomes ill or there is an emergency. This means that you have to stay near a phone all the time and be no more than an hour and a half from the airport.

Multiple choice WT12

Quiz

Show questions one by one

1. 1. If you want to have a pet, you must be ready to look … it for several years.

   A. ? at

   B. ? for

   C. ? over

   D. ? after

2. 2. I am … to come to the meeting on Monday evening. Please apologize for my absence.

   A. ? capable

   B. ? excused

   C. ? unable

   D. ? disliked

3.   3. My younger sister is very … and so she loves going out but I am much quieter and prefer to stay at home.

A.   ?   enjoyable

B.   ?   funny

C.   ?   pleasing

D.   ?   lively

4.   4. We have arranged special insurance to cover medical … in the event of an accident.

A.   ?   prices

B.   ?   expenses

C.   ?   accounts

D.   ?   money

5.   5. At the hospital I was told that … I gave up smoking immediately my illness would get much worse.

A.   ?   except

B.   ?   until

C.   ?   without

D.   ?   unless

6.   6. The … were told to fasten their seat belts as the plane began its descent.

A.   ?   customers

B.   ?   riders

C.   ?   flyers

D.   ?   passengers

7.   7. All Mike's friends felt sorry … him when he had to give up playing football.

A.   ?   with

B.   ?   for

C.   ?   about

D.   ?   at

8.   8. There was nothing to … him with the burglary until the police found a gold ring in his car.

A.   ?   link

B.   ?   fix

C.   ?   place

D.   ?   join

9.   9. Ever … he was in junior school Nicholas has wanted to become a doctor.

CXII

9. 9. Ever … he was in junior school Nicholas has wanted to become a doctor.

A. ? after

B. ? always

C. ? next

D. ? since

10. 10. The bank manager … me to open a deposit account as soon as possible.

A. ? warned

B. ? advised

C. ? suggested

D. ? approved

11. 11. It will … rain later so we should go and have our picnic now.

A. ? preferably

B. ? probably

C. ? likely

D. ? usually

12. 12. I am afraid that we don't have any … sizes in stock, madam.

12. 12. I am afraid that we don't have any … sizes in stock, madam.

A. ? higher

B. ? larger

C. ? greater

D. ? taller

13. 13. … each school year all the children were given copies of the school rules.

A. ? At first

B. ? Immediately

C. ? At the beginning of

D. ? To start with

14. 14. I can … with most things but I cannot stand noisy children.

A. ? put aside

B. ? put on

C. ? put up

D. ? put off

15. 15. Is there … bread for all the sandwiches we have to make?

15. 15. Is there ... bread for all the sandwiches we have to make?

A. ? correct

B. ? enough

C. ? plenty

D. ? equal

16. 16. There was nothing ... to eat in the refrigerator or in the cupboard.

A. ? at last

B. ? at least

C. ? at once

D. ? at all

17. 17. Could you please ... exactly what you saw?

A. ? inform

B. ? point

C. ? advise

D. ? describe

18. 18. Last summer was so hot that the ... in the wood actually dried up.

A. ? pond

B. ? bath

C. ? bowl

D. ? flood

19. 19. The new secretary in the sales department is a fast typist but her letters are full of spelling ... .

A. ? wrongs

B. ? faults

C. ? tricks

D. ? mistakes

20. 20. Membership of the club, which ... a lot of money, is only open to people over the age of 60.

A. ? stands

B. ? costs

C. ? prices

D. ? coasts

CXIV

Composition

You are studying abroad and have run out of money. Write a letter to your parents (at least 100 words) explaining why you have no money, and asking them to send you some more. Keep a structure of the letter (addresses, date, salutation etc.).

Send it to the teacher via e-mail.
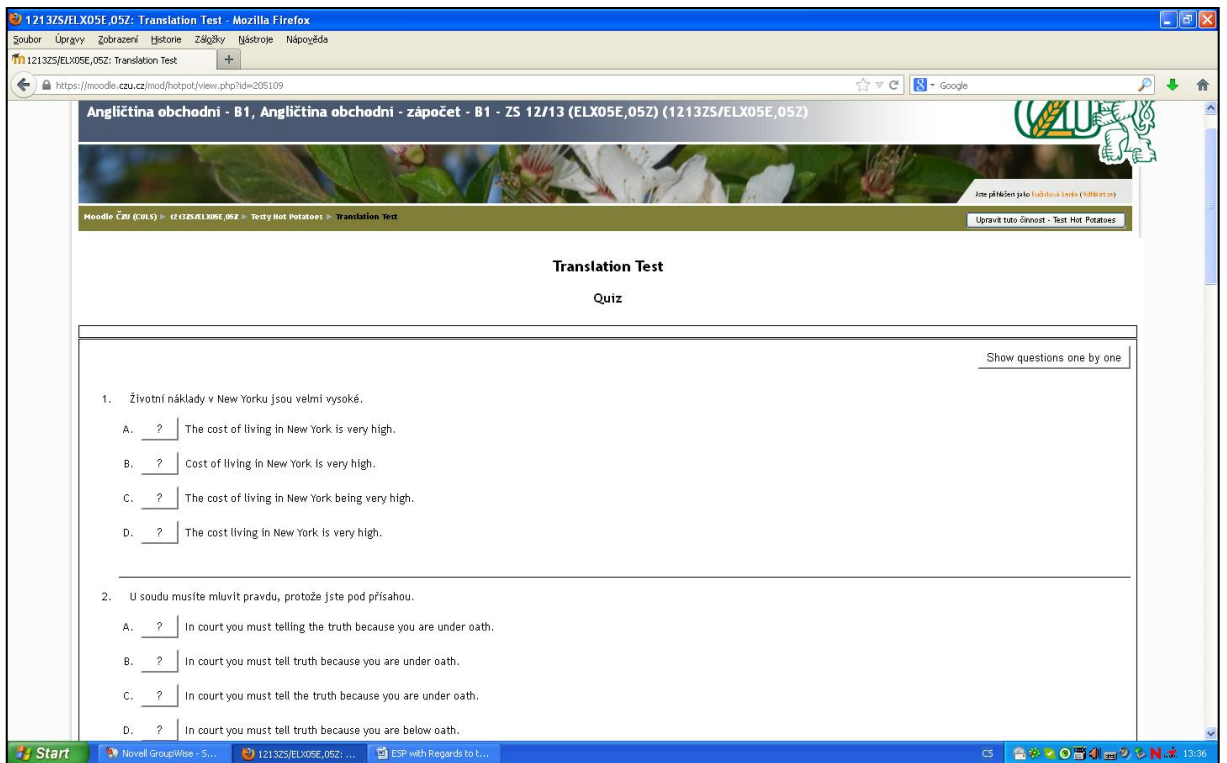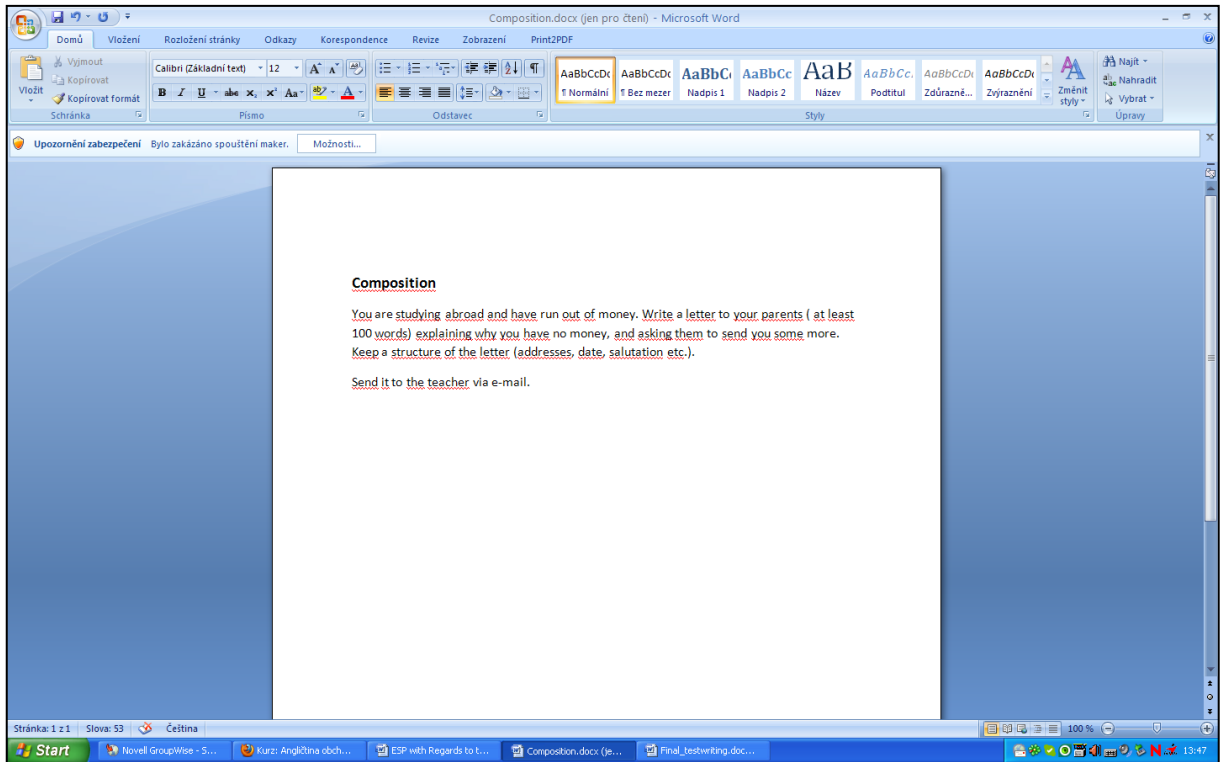
Angličtina obchodní - B1, Angličtina obchodní - zápočet - B1 - ZS 12/13 (ELX05E,05Z) (1213ZS/ELX05E,05Z)

Translation Test

Quiz

Show questions one by one

1. Životní náklady v New Yorku jsou velmi vysoké.

   A. ? | The cost of living in New York is very high.

   B. ? | Cost of living in New York is very high.

   C. ? | The cost of living in New York being very high.

   D. ? | The cost living in New York is very high.

2. U soudu musíte mluvit pravdu, protože jste pod přísahou.

   A. ? | In court you must telling the truth because you are under oath.

   B. ? | In court you must tell truth because you are under oath.

   C. ? | In court you must tell the truth because you are under oath.

   D. ? | In court you must tell truth because you are below oath.

3. Moje neteř myslí více na peníze a na dům, než na něj.

A. ? My niece thinks more of money and the house than of him.

B. ? My niece thinks more of money and the house then of him.

C. ? My niece more thinks of money and the house then of him.

D. ? My niece thinks more of money and the house than off him.

4. Děti v obličeji zčervenaly, protože v jídelně bylo příliš horko.

A. ? The children went red in face because it was too hot in the dining room.

B. ? The children went red in face because it was too hot in dining room.

C. ? The children went red in the face because it was too hot in the dining room.

D. ? The children went red in the face because in the dining room was too hot.

5. Můj učitel mne povzbudil, abych šel na tuto zkoušku.

A. ? My teacher encouraged me to take this examination.

B. ? My teacher encouraged me take this examination.

C. ? My teacher encouraged me to taking this examination.

D. ? My teacher encouraged to me to take examination.

6. Rozhodla se, že přestane hrát na housle.

---

6. Rozhodla se, že přestane hrát na housle.

A. ? She had decided to stop play the violin.

B. ? She has decided stop playing the violin.

C. ? She has decided to stop playing the violin.

D. ? She decided stop playing the violin.

7. Jestli se neomluví (on), nikdy ho sem nepozvu.

A. ? If he doesn´t apologize, I will invite never him here.

B. ? If he doesn´t apologize, I will never invite him here.

C. ? If he won´t apologize, I will never invite him here.

D. ? If he won´t apologize, I will not never invite him here.

8. Musela zalévat ty rostliny přinejmenším jednou týdně.

A. ? She had water the plants at least once a week.

B. ? She had watered the plants at least once a week.

C. ? She had to watered the plants at least once a week.

D. ? She had to water the plants at least once a week.

9. Toto je nejstarší kostel ve městě.

8.   Musela zalévat ty rostliny přinejmenším jednou týdně.

A. [?] She had water the plants at least once a week.

B. [?] She had watered the plants at least once a week.

C. [?] She had to watered the plants at least once a week.

D. [?] She had to water the plants at least once a week.

9.   Toto je nejstarší kostel ve městě.

A. [?] This is the oldest church in the city.

B. [?] This is the elder church in the city.

C. [?] This is the older church in the city.

D. [?] This is the eldest church in the city.

10.   Petr navštěvuje svoji babičku obvykle každou středu.

A. [?] Peter sometimes visits his Granny every Wednesday.

B. [?] Peter ever visit his Granny every Wednesday.

C. [?] Peter usually visits his Granny every Wednesday.

D. [?] Peter often visit his Granny every Wednesday.

Appendix 16: Post-test

7.   77. To whom is Bob talking?

A.   ?   Faculty members

B.   ?   Sports professionals

C.   ?   Potential members

D.   ?   His employees

8.   78. What does the organization offer?

A.   ?   Complimentary clothes

B.   ?   Free tennis equipment

C.   ?   Tennis classes

D.   ?   Swimming lessons

9.   79. What will the speaker show the listeners next?

A.   ?   The tennis courts

B.   ?   The front desk

C.   ?   The pro shop

D.   ?   The swimming pool

80. What type of company is Instant Marketing?

10.   80. What type of company is Instant Marketing?

A.   ?   Small

B.   ?   New

C.   ?   Failing

D.   ?   Expanding

11.   81. What is the purpose of the talk?

A.   ?   To sell a company´s product

B.   ?   To recruit representatives

C.   ?   To open an office in a new country

D.   ?   To improve customer service

12.   82. What can participants do at the end of the talk?

A.   ?   Complete an application

B.   ?   Answer the speaker´s questions

C.   ?   Have an interview

D.   ?   Take a tour of the company

13.   83. Who is most likely listening to the talk?

CXIX

13.   83. Who is most likely listening to the talk?

A.   ?   Vegetarians

B.   ?   Bankers

C.   ?   Statisticians

D.   ?   Meat producers

14.   84. What happened in 2004?

A.   ?   George Neal became a vegetarian.

B.   ?   People ate less red meat than ever before.

C.   ?   Red meat became the most popular food in the country.

D.   ?   There was an electoral campaign.

15.   85. Why is Mr. Neal well known?

A.   ?   He sells excellent beef.

B.   ?   He successfully advertises meat.

C.   ?   He campaigns against meat consumption.

D.   ?   He was elected in 2004.

Questions 59 through 61 refer to the following conversation.

Woman: Where are you taking your wife for her birthday?

Man: I thought I'd take her to that little French place downtown. We haven't been there yet.

Woman: Be sure to make reservations. They've been fully booked since they opened.

Man: I called today. I got reservations for next Monday.

Woman: You'll enjoy it. My co-workers took me there to celebrate my promotion, and we all loved it.

Questions 62 through 64 refer to the following conversation.

Man: I'm dropping off two rolls of film. Will they be ready for my assistant to pick up tomorrow?

Woman: If she arrives after four, the pictures will be ready.

Man: That'll be fine. I really appreciate it. What's the charge?

Woman: For two rolls, it comes to twenty-six fifty.

Questions 65 through 67 refer to the following conversation.

Woman: How long is your flight to Ankara?

Man: Well, I fly from Chicago to New York to Paris, and then to Turkey. It's around sixteen hours.

Woman: Better you than me. I don't enjoy those long trips anymore.

Man: Oh, I don't mind them. I just take a long nap.

Woman: I hope you're planning to take your own food. There's nothing worse than eating those airplane meals.

Questions 68 through 70 refer to the following conversation.

Man: Here's a request form for those supplies you wanted me to get.

Woman: I was just leaving for a meeting tonight. Can I complete it first thing in the morning?

Man: Sure, but I'll need it on my desk by ten o'clock if you want those things before the end of the week.

PART 4

Questions 71 through 73 refer to the following speech.

Good afternoon and welcome to the grand opening of the Metro Department Store. Here is a coupon for a free drink at our café. We are open until 9:00 this evening and there will be music and entertainment from 7:00 to 9:00. Today only, everything in the store is 15% off the listed price. In addition, if you apply for a Metro account, you will receive an additional 10% discount. Enjoy your shopping!

Questions 74 through 76 refer to the following announcement.

We'll begin our weekly meeting with an announcement. After months of searching, we're pleased to have finally found new office space. It took us longer than expected, but it was worth the wait. The new office is on 9th and Ball, right across from *Dextech*. Since *Dextech* is one of our largest accounts, the location couldn't be more convenient. We'll be moving the first week of October, which is just one month away. We have lots to do and will be asking for all of your help.

Questions 77 through 79 refer to the following short talk.

My name is Bob. First, I'll give you a tour of the facility and then we can talk about prices. I see that you're interested in tennis and swimming, so let's go out to the courts first. We have ten outdoor and five indoor courts and during peak times, reservations are recommended. Our club professional gives private lessons and offers an open clinic on Saturday mornings. The club team starts competition in early April. Next to the front desk, we have a pro shop where you can purchase equipment and clothes. We'll go down the stairs now to the swimming pool.

Questions 80 through 82 refer to the following talk.

Thank you for inviting me to speak tonight. I represent one of the fastest-growing organizations in the world. *Instant Marketing* has offices in fifty countries and more than 12,000 representatives. We began operations fifteen years ago. Since then, we have demonstrated how any organization can increase profits by identifying customers and their needs. Our business model can be used for any size business; from a multinational giant to a local entrepreneur. My goal tonight is to give you an idea of what *Instant Marketing* does and talk specifically about the role of an *Instant Marketing* representative.

I'll answer questions at the end and for those of you who are interested in becoming a representative, I have application forms.

Questions 83 through 85 refer to the following short talk.
Please, ladies and gentlemen, may I have your attention! It is my great privilege to introduce to you the man who revolutionized our industry. In 2004, consumption of red meat had hit an all-time low in this country. The man who is with us here tonight was able to turn that around with the introduction of his brilliant advertising campaign. As a result, not only were ad campaigns changed forever, but meat consumption reached an all-time high. Join me in welcoming our hero, Mr. George Neal.

Questions 86 through 88 refer to the following announcement.
Attention all passengers. In approximately 30 minutes we will be crossing the border. A customs official will pass by each compartment to check all passengers' documents. You will not be allowed to leave the train, so please do not get off. It is necessary to present documents for all passengers, so for those traveling with small children, please have all your papers together. As a reminder, no locally grown fruits or vegetables can be transported across the border. The officials will have containers for any items that need to be discarded. If you have any items to declare, please complete one of the appropriate forms. Thank you for your attention.

Questions 89 through 91 refer to the following talk.
Today we will conclude this year's series of talks on design in the workplace. Many of us began to work when a symbol of success was the corner office. Then the workplace environment changed with the concept of open space and cubicles. Our host tonight will lead a discussion with five workplace designers about the effectiveness and limitations of open space. They will discuss the latest trends and show us examples of their innovative designs. Afterwards, three members of the audience have brought videos of their current offices which we'll look at and the experts will comment on.

Questions 92 through 94 refer to the following announcement.
The Commission on Excellence in Innovation has received over 500 entries in this year's contest. A panel of 25 judges has reviewed each of the entries in depth. This process, as you can imagine, has been time-consuming. However, the Commission is pleased to announce the winners of the contest. The top five entries will receive a one-year scholarship at the Commission's headquarters in Bern, Switzerland. There, the winners will be able to continue their research and experimentation with all costs covered. The grand winner, in addition to the year in Bern, will receive a cash award of $100,000. Before announcing the winners, we would like to congratulate all contestants for the fine work that was submitted.

Questions 95 through 97 refer to the following news report.
People's dissatisfaction with their appearance continues to increase. Five years ago the International Committee on Personal Image was formed to address this problem. The committee is concerned with improving people's attitudes towards their bodies. Committee members, who represent twenty-four countries around the world, all agree that people in their countries are not satisfied with how they look. This is a serious issue that can lead to a range of problems. Unhappy people react by spending a lot of money on surgery, expensive beauty treatments and designer clothes. Some people even suffer from eating disorders. The committee has announced that next week is "International Body Image Week," and they hope that people worldwide will learn how to stay healthy and happy. Our convention center will offer fun activities about nutrition and exercise throughout the entire week. Everyone is welcome to attend this free special event.

Questions 98 through 100 refer to the following advertisement.
Over one million subscribers read *Financial Center* every week. Our readers rely on *Financial Center* for all of the latest financial news. Your company should advertise in our publication. Our subscribers are 60% male and 40% female. Almost 100% work full-time and about 75% of them have a large income. They are active and interested in trying new things. Most readers exercise several times a week. They travel internationally two times a year and they travel in their home countries twice as much. Our readers are intelligent and prosperous – the perfect group to read your company's advertisements and buy your products.

Moodle ČZU (CULS) ► 1213ZS/ELX05E,05Z ► Testy Hot Potatoes ► Final test - reading comprehension   Upravit tuto činnost - Test Hot Potatoes

Final test - reading comprehension

Quiz

Final test - reading comprehension

European Single Market

The 1957 Rome Treaty establishing the European Economic Community (EEC) made it possible to abolish customs barriers within the Community and establish a common customs tariff to be applied to goods from non-EEC countries. However, customs duties were only one aspect of protectionist barriers to cross-border trade. In the 1970s, other trade barriers hampered the complete achievement of the common market. Some of the member states were particularly hard hit by economic recession in the wake of the two oil crises in 1973 and 1980.

In June 1985, the Commission, under its then President, Jacques Delors, published a White Paper seeking to abolish, within seven years, all physical, technical and tax-related barriers to free movement within the Community. The aim was to stimulate industrial and commercial expansion within a large, unified economic area on a scale with the American market. The enabling instrument for the single market was the Single European Act setting out a timetable for taking hundreds or so of steps necessary for completing the single market by 1993, which came into force on 1 July 1987. So far, the single market objectives have been successfully achieved.

The single market today

● All border controls within the EU on goods have been abolished, together with customs controls on people. Random spot checks by police (part of the fight against crime and drugs) still take place when necessary.

The Schengen Agreement, which was signed by a first group of EU countries in 1985 and later extended to others (although Ireland, the United Kingdom, Cyprus, Bulgaria and Romania do not participate), governs police cooperation and a common asylum and immigration policy, so as to make it possible to completely abolish checks on persons at the EU's internal borders.

● For the majority of products, EU countries have adopted the principle of mutual recognition of national rules. Any product legally manufactured and sold in one member state must be allowed to be placed on the market in all others.

Show questions one by one

1.   The aim of the White paper was

A.   ?   to set out a timetable for taking steps necessary for completing the single market

B.   ?   to abolish barriers for free movement within the Community and to stimulate industrial and business expansion

C.   ?   to open national services markets

D.   ?   to govern police cooperation and immigration policy

2.   The services sector has been liberalized because of

A.   ?   the abolishing controls on persons at internal borders of the EU

B.   ?   the fight against the crime and drugs

C.   ?   a new technology being used

D.   ?   the mutual recognition or coordination of national rules that concern the access to or practice of certain professions

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national rules. Any product legally manufactured and sold in one member state must be allowed to be placed on the market in all others.

It has been possible to liberalise the services sector thanks to mutual recognition or coordination of national rules concerning access to or practice of certain professions (law, medicine, tourism, banking, insurance, etc.). Action has been taken to improve worker mobility, and particularly to ensure that educational diplomas and job qualifications (for plumbers, carpenters, etc.) obtained in one EU country are recognised in all the others.

● The opening of national services markets has brought down the price of national telephone calls to a fraction of what they were 10 years ago. Helped by new technology, the internet is being increasingly used for telephone calls. A competitive pressure has led to significant falls in the price of budget airfares in Europe.

D.   ?   the mutual recognition or coordination of national rules that concern the access to or practice of certain professions

3.   Customs controls on people have been abolished together with

A.   ?   national telephone calls controls

B.   ?   border controls within the EU on goods

C.   ?   job qualification controls

D.   ?   random spot police controls

4.   The European Economic Community was established by

A.   ?   White Paper

B.   ?   Schengen Agreement

C.   ?   Rome Treaty

D.   ?   Single European Act

5.   The prices of national telephone calls

A.   ?   have gone up

B.   ?   have fallen

C.   ?   were the same as 10 years ago

D.   ?   have stagnated

Angličtina obchodní - BT, Angličtina obchodní - zápočet - BT - ZS 12/13 (ELX05E,05Z) (1213ZS/ELX05E,05Z)

Moodle CZU (CULS) ▸ 1213ZS/ELX05E,05Z ▸ Testy Hot Potatoes ▸ Final test-vocabulary

Upravit tuto činnost - Test Hot Potatoes

Final test-vocabulary

Quiz

Show questions one by one

1. Businesses earn ... by selling a product or service.

    A. ?   return

    B. ?   revenue

    C. ?   profit

    D. ?   cost

2. A manufactured product is usually a thing that is ... .

    A. ?   intangible

    B. ?   tangible

    C. ?   negligable

    D. ?   tertiary

3. It is essential that we ... this consignment to our customers on time.

    A. ?   receive

    B. ?   result

    C. ?   deliver

    D. ?   ask

4. Unless we receive the components within the next five days, the order ... .

    A. ?   will be placed

    B. ?   will be taken

    C. ?   will be held

    D. ?   will be cancelled

5. It is difficult for a sole trader to ... with large firms.

    A. ?   competitor

    B. ?   comprise

    C. ?   compare

    D. ?   compete

6. The business is not ... as a separate legal entity.

B.   ?   resulted

C.   ?   running

D.   ?   reporting

7.   The need to expand ... some to form a partnership.

A.   ?   causes

B.   ?   holds

C.   ?   deals with

D.   ?   analyses

8.   ... are less common in Britain than in some other countries.

A.   ?   Joint stock companies

B.   ?   Cooperatives

C.   ?   Limited liability companies

D.   ?   Partnerships

9.   Public enterprise is run in the ... of the public.

A.   ?   share

B.   ?   process

10.   Public limited company can appeal to the public for more capital by means of shares and ... .

A.   ?   debts

B.   ?   ownership

C.   ?   sales

D.   ?   debentures

11.   To get consumers to buy some of this excess ... from you, you must reduce the price.

A.   ?   demand

B.   ?   supply

C.   ?   supplier

D.   ?   demands

12.   A. Smith agreed with the physiocrats and their policy of ... .

A.   ?   laissez fair

B.   ?   laissez faire

C.   ?   faire laissez

D.   ?   fair laisse

13.   A. Smith disagreed with the mercantilists who measured the wealth of a nation by its money ... .

A.   ?   supply

A.   ?   supply

B.   ?   demand

C.   ?   benefit

D.   ?   advantage

14.   If the business failed, they would not be personally liable for business ... .

A.   ?   insurance

B.   ?   debtors

C.   ?   liability

D.   ?   debts

15.   Incorporated organizations are registered, can sue or be sued and have ... .

A.   ?   unlimited liability

B.   ?   non-limited liability

C.   ?   limited liability

D.   ?   limiting liability

16.   Supply is the amount of a product or service that producers ... to sell.

A.   ?   are reluctant

B.   ?   are willing

C.   ?   are liable

D.   ?   are related

17.   If prices fell below the market ..., there would be an excess demand.

A.   ?   research

B.   ?   survey

C.   ?   price

D.   ?   share

18.   We operate on a 10% ... basis on net prices.

A.   ?   provision

B.   ?   advertising

C.   ?   commission

D.   ?   direct

19.   Companies can raise extra money by issuing more ... for sale.

A.   ?   shares

B.   ?   goods

C.   ?   industries

D.   ?   wealth

20.   The members of the organization have common ... .

A.   ?   goals

B.   ?   features

C.   ?   manners

D.   ?   examples

21.   It was a pleasure to receive your ... .

A.   ?   enquiry

B.   ?   mail

C.   ?   correspondence

D.   ?   enquire

22.   There would certainly be no trouble in ... you from our wide selection of garments.

A.   ?   providing

B.   ?   supplying

C.   ?   sending

D.   ?   receiving

23.   We can offer you the quantity ... you asked for.

23.   We can offer you the quantity ... you asked for.

A.   ?   price

B.   ?   discount

C.   ?   term

D.   ?   order

24.   We always deal on payment by sight ... .

A.   ?   bill

B.   ?   receipt

C.   ?   invoice

D.   ?   draft

25.   We are pleased to ... our summer catalogue.

A.   ?   add

B.   ?   fill

C.   ?   enclose

D.   ?   comprise

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Upravit tuto činnost - Test Hot Potatoes

Final test-translation

Quiz

Show questions one by one

1.   V Brně nabízí své služby 70 realitních kanceláří a 40 významných pojišťoven.

   A.   ?   In Brno there offer their services 70 real estate agencies and 40 important insurance companies.

   B.   ?   In Brno offer their services 70 real estate agencies and 40 important insurance companies.

   C.   ?   In Brno there offer its services 70 real estates and 40 important insurance companies.

   D.   ?   In Brno offer their services 70 real estate agencies and 40 important insurancies.

2.   Má širokou nákupní síť, dobrou městskou dopravu a vysoce kvalitní zdravotnické služby.

   A.   ?   It has broad network, good public transport and medical services of a high quality.

   B.   ?   It has a broad network, a good traffic and medical services of a high quality.

   C.   ?   It has a broad retail network, good public transport and medical services of a high quality.

   D.   ?   It has a broad retail network, a good traffic and high quality of medical services.

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3.   Poptávka po našem zboží se již zvýšila.

   A.   ?   Demand of our goods has already increased.

   B.   ?   Demand of our goods already increased.

   C.   ?   Demand for our goods has already increased.

   D.   ?   Demand for our goods has already been increasing.

4.   Adam Smith nesouhlasil s regulací ekonomiky.

   A.   ?   Adam Smith didn´t agree with the regulation of economy.

   B.   ?   Adam Smith hasn´t agreed with the regulation of economy.

   C.   ?   Adam Smith hasn´t agreed with the regulation of economics.

   D.   ?   Adam Smith didn´t agree with the regulation of economics.

5.   Společnost s ručením omezeným je klíčovým faktorem rozvoje kapitalismu.

   A.   ?   Public limited company is a key factor of capitalism development.

   B.   ?   Limited liability company is key factor in capitalism development.

   C.   ?   Public limited company is a key factor in capitalist development.

   D.   ?   Limited liability company is a key factor of capitalism development.

6.   Poptávka je množství zboží, které jsou lidé ochotni zakoupit.

D.   ?   Limited liability company is a key factor of capitalism development.

6.   Poptávka je množství zboží, které jsou lidé ochotní zakoupit.

A.   ?   Demand is the amount of goods that people are willing to purchase.

B.   ?   Demand is amount of goods that people are willing to purchase.

C.   ?   Requirement is amount of goods that people are willing to purchase.

D.   ?   Requirement is the amount of goods that people are willing purchase.

7.   Nízké daně a nízké úrokové sazby zvýší kupní sílu zákazníků.

A.   ?   Low tax and low interest rates will increase the spending power of customers.

B.   ?   Low taxes and low interest rates will increase the spending force of customers.

C.   ?   Low taxes and low interest rates will increase the spending power of customers.

D.   ?   Low taxes and low interest rates will increase the spent force of customers.

8.   Poptávka a nabídka se neustále mění, což ovlivňuje ceny zboží.

A.   ?   Demand and offer are constantly changing which influences prices of goods.

B.   ?   Demand and supply are constantly changing which influences prices of goods.

C.   ?   Demand and supply are constantly changing what influences awards of goods.

D.   ?   Demand and offer are constantly changing which influences awards of goods.

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9.   Investoři by se zdráhali vkládat peníze do průmyslových podniků.

A.   ?   Investors would be reluctant to invest money into industrial companies.

B.   ?   Investors would have been reluctant to invest money into industrial companies.

C.   ?   Investors would be reluctant to insert money into industrial companies.

D.   ?   Investors would reluctant to insert money into industrial companies.

10.   Riziko by bylo příliš vysoké.

A.   ?   The risk would have been too high.

B.   ?   The risk would have been a too high.

C.   ?   The risk would be too high.

D.   ?   The risk would been too high.

Final test – writing

Write an enquiry (at least 100 words) for an ideal product that was advertised in the Economist.

Keep the correct layout of a business letter (addresses, date, salutation etc.).

Send it to the teacher via e-mail.

CXXX