On the Issue of Adapting Materials for the English for Specific Purposes Online Course

Rimma BIELOUSOVÁ¹

¹PhD, Technical University of Košice,
Faculty of Manufacturing Technologies,
Prešov, Slovakia,
rimma.bielousova@tuke.sk

Abstract: Nowadays, educational institutions in Slovakia are looking for solutions to improve learning using adaptive software to meet the needs of a wide range of skill levels in a single classroom. In line with the educational challenges of the 21st century, language teachers of the Faculty of Manufacturing Technologies of the Technical University of Kosice in Slovakia have been using contemporary methods in the process of foreign languages teaching for several years. Based on blended learning concept implementation, the author presents the newly designed online course EnGeRu (English, German, Russian for Technicians) which serves as a supplementing platform to the full-time teaching course. To create this dynamic environment, the Moodle platform has been used. The course is available at <http://web.tuke.sk/fvt-engeru/> to serve the needs of the Faculty of Manufacturing Technologies as well as other technically oriented faculties and universities. Key to success in the development of teaching materials for online courses depends heavily on the ability of language teachers to adapt the materials within current technological contexts to serve the needs of the future technicians. The author considers Internet resources as freely gettable tool that can be further adapted for special needs of English language learners. Following the principles of materials development, several examples of materials adaptation for English language online course are presented. The model of a blended e-learning course can be utilized as a pattern for various English for Specific Purposes (ESP) courses, which are nowadays widely developed and implemented at technical universities, especially when learners need to develop special language competencies within the context of special technical disciplines.

Keywords: *adapting technical text; blended learning; learner-centred approach; online laboratory, ESP online course; Moodle platform.*

How to cite: Bielousová, R. (2020). On the Issue of Adapting Materials for the English for Specific Purposes Online Course. *Revista Romaneasca pentru Educatie Multidimensionala*, 12(1Sup1), 60-76.
<https://doi.org/10.18662/rrem/12.1sup1/223>

1. Introduction

Transition from face-to-face(FtF) learning model to one that utilizes up-to-date technology has been observed within higher education context. Various approaches have been suggested to solve the issue. In his work, Gasevic points out that technology could actuate the quality of educational process, teaching approaches as well as learners themselves (Gasevic, 2015). Many authors support the position by stating that current educational softwares, especially learning management systems (LMSs), enable universities to implement blended learning concept and thus expand distance learning (Lust et al. 2012). Some authors maintain that traditional universities should in fact “reinvent themselves” meaning that they need to switch quickly from a program portfolio, which is understood as management of a learning process, to educational practice (Avdoshin, Pesotskaya, 2019).

2. Blended learning as a learner-centred approach

The term “blended learning” originated in the business world within a collaborate training context. Later, it has been implemented into higher education and finally it occurred in the language education context (Sharma & Barrett, 2007). Blended learning is an approach that combines FtF interaction and online support to live interaction usually in the form of an online course. Having designed a well-structured ESP online course, we can develop needed language skills more efficiently.

In the literature, blended learning is also identified as a fusion of technology and educator’s instructions and, at the same time, its formative access to both learning and teaching process as well as benefits of online training that could result in learning results improvement are being emphasized (Banados, 2006).

For Neumeier, blended learning is a synthesis of FtF and computer-assisted learning (CAL) (Neumeier, 2005). Having offered almost the same clarification of blended learning as Banados and Neumeier, Stracke expands CAL into computer assisted language learning (CALL) emphasizing the positive effect of independent student’s work with technology (Stracke, 2007). Several Czech researchers consider blended learning, especially when used in a foreign language teaching, to be advanced and effective means. The authors view online courses as a necessary technical component of blended learning concept as well as a motivating element which reinforces each educational process (Hubackova et al. 2011).

In line with the educational challenges of the 21st century, educational institutions in Slovakia are looking for solutions to improve learning using adaptive software and other online resources to meet the needs of a wide range of skill levels in a single classroom. Within the traditional education model, a teacher, who, as a rule, is responsible for learning management, usually plays an active role while a student, who is responsible only for learning, possesses a passive role. Thus, we consider this model to be “teacher centred”. Blended learning approach enables us to place a student at the centre of the process. That is why we view this process as “learner-centred”. Being flexible in time, place and pace, a learner can actually influence the learning process. Applying a learner-centred approach to a blended classroom should build time and opportunity for students to try on new roles and practice learning or working in ways that move far beyond the initial knowledge transfer.

Having considered e-learning as the current way of learning, we introduced blended learning in all foreign language courses at our faculty: English, German and Russian. For the purpose of this paper, we will deal only with the English language course. The English language course book “Essential English II for Students of the Faculty of Manufacturing Technologies” has been designed to prepare students studying manufacturing technology for communication in English in their future work as technicians and engineers (Bielousova, 2018). The course book, which is used during FtF meetings, is supported by the online course “English Language for Technicians” considered as supplementing platform thus enabling students to work independently respecting their individually different needs, abilities and skills.

The online course focuses on developing written, listening and reading skills while FtF classes concentrate on speaking. During the introductory FtF meetings we have to explain the function of the online components, their stages as well as how a feedback is provided. The Moodle system (modular object-oriented dynamic learning environment) serves us as a platform where students can find specially designed learning materials ready for download as well as useful links to the other websites. Teachers can regularly post necessary information via news forum, online discussion forum thus discussing student’s progress and enhancing their learning. According to The Common European Framework of Reference for Languages, the level of the course fits in the grade B2.

Learning materials for both FtF meeting and online course include topics which are subject-specific: Automotive Industry, Engines, Gears, Transmissions, Water Jet Machining, Hydroforming, Plasma Cutting,

Electron Beam Machining, Electrical Discharge Machining, Renewable Energy Sources etc. Individuals chapters consists of the adapted text, grammar focus, special terminology related to the particular topic, and usually further references to relevant materials on the Internet. Each topic includes the online activities that further exploit the topic and a test to obtain a quick feedback for both students and a teacher. We view the advantage of electronic learning materials integration in terms of their flexibility. Audio and video materials can be quickly integrated into the online course as well as changed and updated when necessary.

3. Rationale of our blended approach

Researches have already presented the results of the comparative study regarding blended learning approach within two Czech universities emphasizing high visit rate for the designed online course (Simonova, Kostolanyova, 2016). Simonova also recommends to apply blended learning approach especially when mastering English grammar in ESP (Simonova, 2018).

Many authors support the position by viewing blended learning as a possibility for a learner to manage his/her knowledge and skills needed for the particular field (Smirnov, Ibatova, 2019). We agree with Klimova who calls for more experimental studies on blended learning effectiveness (Klimova, 2017).

Some investigators have already developed an effective model of the online course within the bachelor study programme Management of Tourism stating the fact that the success rate has increased while the failure rate has reduced (Cerna, Borkovcova, 2018).

Despite the fact that implementation of blended learning model has not always proved its effectiveness clearly, the researches involved in e-learning consider blended learning model to be the right way for further investigation to be done in the field (Simonova, Poulova, Kostolanyova, 2016).

4. Utilizing University online laboratory

The online laboratory is an open source LMS which allows us to interact within a particular course or institution. Moodle LMS, which is widely utilized nowadays by many universities, enables us to provide both FtF teaching and online learning. To manage effectively the online course, teachers use Virtual learning environment (VLE) which includes a number of various tools, such as email, chat, discussion boards, etc. It also involves

testing through specially designed tasks. Moodle is one best known VLE used at European universities.

We can also view the Moodle platform as a delivery system for learning materials. Instead of dealing with paper print-outs, students can pick up material and deliver exercises electronically. One of the biggest benefits of using VLE is that it opens the possibility to create e-learning course taking into account the special needs of a technology student. Another benefit of VLE is that it affords students to access the course material at any time which especially suits part-time students who are motivated by the instant feedback provided by online assessments. The learning management systems also allow us to organize pre-existing content and display a new one. Finally, the password-protected environment contains administration functions allowing us to organize groups in terms of enrolling students to courses. Modules are components created via Moodle to provide interaction among students and teachers. A learning module is the building block of an online course. It is a sequenced collection of subject-related materials designed to teach a topic or skill. Online learning modules usually include: learning objectives, directions for use, learning materials, learning activities as well as the ways to ascertain whether students have understood or learned the material.

Nowadays, many researches and foreign language teachers who work at universities widely utilize the online laboratory to design courses for their students. Based on the Moodle platform, the Ukrainian researches have implemented this innovative e-learning technology to master a specific discipline at agrarian university. The authors of this online course emphasize effective online collaboration between students and teachers (Bilotserkovets and Gubina, 2019). Czech investigators have also make use of the e-learning method and created their own online courses within the blended learning concept. The authors have designed online language courses for both full-time and part-time study at University of Hradec Kralove in Czech Republic (Hubackova et al. 2011).

Having utilized the online laboratory, we have designed the online course as a supplementary basis to the foreign language courses in English, German and Russian (the web page was named as EnGeRu). The course is available at <http://web.tuke.sk/fvt-engeru/> to serve the needs of the Faculty of Manufacturing Technologies and other technically oriented faculties and universities.

5. Materials Adaptation

ESP learner-centred approach comprises needs analysis of the students which is followed by formulation of aims and objectives, content selection of the teaching materials, assessment and evaluation. Foreign language courses are optional courses in our faculty syllabus. As these courses are aimed at first-years students almost with no working experience, we did not conduct needs analysis that is usually considered to be the very first stage when designing the content of the ESP course. In this paper we will focus on one of the issues: materials selection and adaptation.

As Ellis and Johnson emphasize, selection of learning materials in of great importance because it has a considerable impact on the course itself. To achieve the impact, we have to determine the kind of a language our learners will learn. Then, having selected an appropriate topic, we need to determine vocabulary, grammar structure as well as their functions. Finally, to include activities to develop the necessary skills (Ellis, Johnson, 1994).

Key to success in the development of teaching materials depends heavily on the ability of teachers to adapt the materials. However, the reality shows that there has been a tendency for over-reliance of textbook as classroom teaching materials. As a consequence, teachers may still have lack of experience and familiarity dealing with materials adaptation. Furthermore, many teachers are largely untrained to do materials adaption. Therefore, it can be postulated that they do not have sufficient knowledge about the development of teaching materials (Hanifa, 2017).

Teacher-training education in Slovakia does not include special training aimed at developing course books or other teaching materials to be used in a classroom. As a result, a secondary school teacher, who has to self-train himself/herself in the issue of materials development and its further adaptation, could be frustrated in case of failure. The process of teaching materials development is rather a complicated issue even at universities as it requires, on the one hand, professional skills in the particular area, willingness to participate in the project and, on the other hand, financial costs to cover the expenses.

We agree that it is much easier and less expensive to purchase one common textbook available on the current literature market which is full of course books for academic, tourism, aviation, nursing, business purposes. There are few publications on general engineering, technology and information technology. Even though they have been designed for a target learner, most of them are not adapted to technology student learning style or

contain irrelevant topics. Consequently, they do not meet the special requirements of our graduate's profile.

We have been looking for suitable texts especially within the field of progressive machining processes for several years. Despite the fact that there are many considerations on whether to deal with "tailor-made course books" for special use or not, we have decided to accept the challenge.

Following the traditional model of a course development, which includes needs analysis, setting objectives, designing syllabus, methodology consideration, materials development as well as their testing and assessment, is obvious that materials development stage come as a later stage.

Many university teachers do not consider this rule to be suitable for all the learning contexts and choose the sequence that is more suitable for their conditions. Regarding to this, Rodrigues claims that a classroom teacher should have the capability to set his own order of materials selection, development and evaluation (Rodrigues, 2015). We also agree that investigation of teachers' needs is as important as investigation of learner's ones.

Technical university of Kosice in Slovakia usually determine a student profile in each of the study programmes within the particular study branches where the students' preferences are being defined. The main objectives are then represented in the name of the courses: English for the Students of Manufacturing Technologies, English Language in Technical Practice, Essential English for PhD Students.

We suppose that no single material can possibly work in all situations. Adaptation of existing materials is the result of recognizing a mismatch between the teaching materials and the needs and objectives of the classroom (Marand, 2011). Tomlinson encourages us to make changes to the materials, thus adapting them for our target learners (Tomlinson, 2011).

We understand the process of improving materials with the aim of adjusting them for a target learner as materials adaptation. To adapt authentic materials, we can reduce, modify or supplement them. In Gluchmanová's view, the Internet sources as unbound and simply approachable instrument to be used for teaching materials adaptation which provide teachers with endless online materials from different fields of their interest (Gluchmanová, 2019). Technical aspect of the Internet resources adaptation – saving and reopening desired materials is quiet easy. Another issue to be taken into account is a copyright law application. The Berne Convention recognizes no international copyright, although its regulations restrict the copyright protection of an individual country or institution.

In recent years, the use of the World Wide Web as a resource for foreign language learning materials has gained increasing popularity among teachers. The Internet can be instrumental in learning English offering a lot to both a foreign language teacher and a student. It has several advantages as a source of teaching (Teeler, Gray, 2000):

Scope: as a virtual library the Internet offers almost endless range of topic to choose from. There are a growing number of materials specifically designed for English language teaching. It can be considered as a paperless medium, therefore there are no size restrictions as compared with a course book.

Topicality: content of the Internet is updated on a regular basis. You can get current news without buying them. New publications are added every day, some of them are unavailable in print.

Personalisation: course books are usually limited by the magnitude of the audience they are written for and the topics they deal with may be irrelevant to discuss in the class. Very often teachers need alternative texts, consequently the Internet can simplify the task of finding the appropriate ones. In terms of texts adaptation, teachers usually deal with contexts revision and tasks adjustment. Contexts are revised to emphasize students' experiences and language tasks are modified so that students could learn how to use the language for different purposes. Successful utilization of authentic materials is a matter of adapting those materials to suit the needs of our language learners.

Very often reading is the main skill to be developed when designing ESP courses. Such an approach can be taken into consideration if students expect a certain position within an engineering branch requiring studying a lot of technical literature (Gluchmanová, 2017).

However, the professional field can hardly be predicted. Consequently, when formulating the main objective of the English language course, we had to take this reality into consideration and focus our attention on proportional development of language skills. According to Gluchmanová, we do not prepare specialists skilled mainly in reading and understanding scientific texts. Our graduates will be involved in various engineering activities (Gluchmanová, 2019a, 2019b).

When selecting teaching materials for the English language course, we followed recommendations of the academicians from Technical University and especially the Faculty of Manufacturing Technologies whose investigation in the field of progressive machining is well known in Europe. As a result, the interactive teaching materials on advanced machining

processes for the English language online course were developed thus forming supplementary teaching platform based on the Moodle system.

We agree with the statement that students could learn languages more independently and more self-governed especially when using modern technology outside the classroom (Gluchmanová, 2018). When dealing with materials adaptation for the English language online course, we followed from Tomlinson's position that teaching materials should have impact (Tomlinson, 2011). The impact could be achieved when teaching materials have an observable effect on students in relation to their inquisitiveness as well as attention.

Based on Tomlinson's principles, we would like to present several examples of materials adaptation for English language online course:

Attracting Learners' Interest and Attention:

Topic: Electrical Discharge Machining (EDM)

Task 1: Read the text on electrical discharge machining and match the Slovak equivalents with their corresponding English terms.

Note: To match the correct terms, the clickable dropdown menu of English and Slovak terms is available. The diagram on the electrical discharge machining basic principle is displayed.

*Text 1: The basis of Electrical Discharge Machining process is the **erosion** of metal forced by a spark discharge. An **arc** is produced as a result of the two current-carrying wires that are in the close contact. Having looked carefully at the point where the two **wires** contact each other, we can see that a small amount of the metal erodes, thus leaving a tiny hole. The Electrical Discharge Machining system is composed of a tool, which is also called an electrode, and the workpiece, which usually attached to a **direct current power supply** and immersed into a **dielectric fluid**. A **spark discharges** through the fluid and, as a result, a very small dose of metal is removed from the workpiece surface. This process is possible only if the potential difference between the tool and the workpiece is high enough.*

Task 2: Listen to the following text on <http://www.youtube.com/watch?v=q4FinKsDfww> and complete the text with the suitable words.

Note: No menu to select the terms from is available. Students have to complete the text while listening and watching to the video. The following text is not the exact listening script of the video. It has been slightly modified to keep higher level of students' attention.

Text 2: If we intend to know how Electrical Discharge Machining process removes metal, let us investigate the single..... during the process of erosion. When pulsedelectricity achieves the electrode and a part, an intensive electric field occurs in the slot. Consequently, negligible contaminants appending in the dielectric fluid, are induced by the.....and, as a result, they are concentrated at thecrucial point. The contaminants create a higharc across the slot. As the field'sincreases, metal in thebridge is heated. Some particles are ionized thus forming a sparkbetween the electrode and the workpiece. Now, both temperature andin the channel arises very quickly thus generating a spark. A bubble, which consists of gases, and..... rapidly expands outward from the spark channel.

Including Texts, Illustrations, Schemes, Diagrams Rather Than Just Texts:

Topic: Incineration Plant

Task 1: Study waste incineration plant scheme. It consists of several components each having a specific purpose. Match each component on the left with its specific task on the right.

Note: the appropriate diagram of the Incineration Plant and its components is given.

Task 2: Label the items from the box next to the numbers:

bottom ash extraction, bag house filter, hopper, filter residue silo, metal extraction conveyor, air cooled condenser, shredder, flue gas fan, lime and carbon silo, fuel Crane, heat recovery steam generator, steam turbine, secondary chamber, primary chamber, waste bunker, fuel bunker, stack.

Supporting Schemes and Diagrams with Listening:

Topic: Renewable Energy Sources

Task 1. Study the scheme of water cleaning equipment.

Task 2. Listen to the lecturer who is explaining how water is cleaned before it is piped into homes. Select the correct word for each of the part of the equipment:

disinfector tank, aerator, flash mixer, sedimentation tank, microstrainer, rapid sand filter

Note: Each part of the water cleaning equipment has its own number.

Task 3. Match the certain parts of the water cleaning equipment with their functions:

removes organic components, removes rubbish, allows the bigger particles to settle to the bottom of the tank, provides oxygen balance, adds coagulants, adds chemicals

Note: the selection menu of the components is available.

Selecting Teaching Materials Related to the Special Topics in the Particular Study Area:

Topic: Automobile Industry

Task: Watch the video **Making the Audi R8 – high class automobile production** and choose the correct answer. Click here for video: <https://www.youtube.com/watch?v=mgNF2u4XHm8>

Note: Students do not have any listening script. The clickable dropdown menu of the words to choose from is given:

tenth of a millimetre, 10%, 2400, 24, 4 stages, 100%, 25%, 12, forty million, 35 minutes, 35%, 240, 14 stages, fifth of a millimetre, 45 minutes.

The number of vehicles on the roads in Germany.

Average amount of cars that leave the Audi factory in Ingolstadt each day.

The number of cars built each day at the Audi factory.

The percentage of automated production in the body shop.

The percentage of manual production in the assembly shop.

The tolerance of unevenness in the car body that workers can manually detect.

Car assembly process is divided into (selection from the menu).

Each stage lasts (selection from the menu)

Topic: Electron Beam Machining

Task 1: Complete the text with the suitable words:

source, surface, workpiece, voltages, speeds, machining process.

Note: the clickable dropdown menu of the words to choose from is given.

Text 1: The of energy in this machining process is high-speed electrons striking the of the and generating heat. The equipment uses from 50 keV to 200 keV thus accelerating the electrons to..... of 50% to 80% of light speed. The is used for cutting fine holes and slots in any material.

Task 2: Watch the video on electron beam drilling and answer the following questions. Click here for video: www.youtube.com/watch?v=jbY-tOcI2tM.

What is the economic advantage of electron beam drilling?

What are the typical areas of electron beam drilling application?

Note: During the online lesson, a teacher gives an immediate feedback.

Providing Students with Possibilities to Use the Language for Communication:

Topic: Netiquette

Text: One of the ways how to communicate with your English language teacher is to send him/her an email. Sending an email should be done in the right way. Following are the rules you have to take into account before clicking the button “send”.

Firstly, greet your teacher in a polite manner.

Then, name yourself.

After that, clarify the purpose of your message.

Do not forget to fill in the subject line.

Be careful to use the attachments properly.

Use proper spelling and punctuation (use the spellcheck function)

Finally, read over the text to check it.

Task 1: Rate your online manners with this quick online quiz. Go to:
<http://www.learnthenet.com/test-yourself/netiquette/> .

Task 2: Write the email in English to your teacher on the quiz results. Take into consideration the netiquette rules.

Note: During the online lesson, a teacher gives a feedback to the Task 2. The Task 1 is evaluated online.

6. Discussion

On the one hand, some authors claimed that teachers should consider developing of teaching materials as the last possibility (Hutchinson & Waters, 1987). On the other hand, another researchers mention that due to the lack of relevant teaching materials in the course books available on the market, ESP teachers are very often involved in a process of materials development and adaptation to meet the requirements of specializes groups of learners. The authors point out the fact that apart from teaching, ESP teachers assume a range of other teaching related roles. Investigating learners' needs and the specialist discourse, which they need to acquire, turns ESP teachers into researchers. Moreover, they are often involved in developing tailored-made teaching materials and act also as content-knowledgeable instructors (Basturkmen & Bocanegra-Valle, 2018). Dudley-Evans and St John consider that just a few of the good ESP teachers are also good ESP materials writers (Dudley-Evans & St John, 1998). Contrary to their opinion, Tomlinson notices that teachers all over the world need just a short training, some experience and support in order to become materials writers creating materials relevant to students' needs (Tomlinson 2003).

On the other hand, Hutchinson and Waters remind that materials writing is a fact of life for many teachers and warn that materials created by teachers for the students at a particular institution is in fact an abuse of teachers since it is assumed that if one can teach she/he can also write materials without any prior training in the techniques and skills of materials writing (Hutchinson & Waters, 1987). Some authors also consider it vital for

ESP teachers to continuously interact with teachers teaching other courses in order to gain an insight into the requirements imposed on students attending those courses. This is probably the most convenient way to ensure compliance between the ESP course objectives and students' real needs (Barnard & Zemach 2003).

However, practical studies relating the issue of ESP materials development and especially their adaptation are rather limited. As a result, developing teaching materials is inevitably a process of trial and error. The preparatory stages of the process of materials development would include assessment of students' needs, identification of language elements and pedagogical approaches, selection of activities to be used. In reality, we hardly would start at the very beginning due to time restraints and the effort required. Consequently, in most cases the existing resources are adapted. Fortunately, the Internet offers us resources to start from.

7. Conclusion

Following from the blended learning concept that enables us to combine technology and classroom instructions, we intended to facilitate the foreign language study at our faculty. Although foreign language acquisition is conventionally understood as completely FtF environment, the online courses intend to reach special language improvement utilizing modern technology. The course "Essential English for Students of the Faculty of Manufacturing Technologies" was supported by online course considered as supplementing platform to the full-time teaching. To create dynamic web site EnGeRu (English, German, Russian for Technicians), the Moodle platform as an open source LMS has been used.

Key to success in the development of teaching materials for online courses for technology students depends heavily on the ability of language teachers to adapt the materials within current technological contexts to serve the needs of future technicians. Following the principles of materials development, several examples of materials adaptation for English language online course are presented.

The proposed design of a blended learning online course can be used as a pattern for different ESP courses, which are nowadays widely developed and implemented at technical universities, especially when learners need to develop special language competencies within the context of special technical disciplines.

Although, the experience presented in this paper is a pilot stage of the project and our investigation into this area is still ongoing, potential

extension of the blended learning for foreign language course comes up with cooperative projects within technologically oriented institutes and universities.

Acknowledgement

This work was carried out within the framework of the grant KEGA 001TUKE-4/2019 *Innovative methods and forms of education for the needs and development of language communication skills within the technical professional foreign language study material*.

References

- Avdoshin, S., & Pesotskaya, E. (2019). *SuperBook Concept for a Digital University. Actual Problems of System and Software Engineering*, (pp. 248-258). <http://ceur-ws.org/Vol-2514/paper6.pdf>
- Banados, E. (2006). A blended-learning pedagogical model for teaching and learning EFL successfully through an online interactive multimedia environment. *CALICO Journal* 23(3), 533–550.
- Barnard, R., & Zemach, D. (2003). Materials for specific purposes. In B. Tomlinson (Ed.), *Developing materials for language teaching*. London /New York: Continuum, (pp. 306-323).
- Baştürkmen, H., & Bocanegra-Valle, A. (2018). Materials design processes, beliefs and practices of experienced ESP teachers in university settings in Spain. In Kirkgoz & K. Dikilitas (Eds), *Key issues in English for specific purposes in higher education* (pp. 13-27). Springer, Cham.
- Bielousova, R.(2018). Essential English II for Students of the Faculty of Manufacturing Technologies, *FVT TU Kosice*.
- Bilotserkovets, M., & Gubina, O. (2019). Target language teaching by means of e-learning: a case study. *Revista Romaneasca pentru Educatie Multidimensionala*, 11(4), 17-29. doi:<http://dx.doi.org/10.18662/rrem/154>
- Cerna, M., & Borkovcova, A. (2018). Blended Learning Concept in Selected Tourism Management e-Courses with Focus on Content Development Including Recommender System. In S.K.S. Cheung, L.-f. Kwok, K. Kubota, L.-K. Lee, J. Tokito (Eds.), *Blended Learning. Enhancing Learning Success*, 11th International Conference, ICBL 2018, Osaka, Japan, July 31-August 2, 2018, Proceedings, (pp.175-187).
- Dudley-Evans, T., St John, M. J., & Saint John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge: Cambridge University Press.

- Ellis, M., & Johnson, P. (1994). *Teaching Business English*. Hong Kong: Oxford University Press.
- Gasevic, D. (2015). *Preparing for the digital university: A review of the history and current state of distance, blended, and online learning*, University of Edinburgh, 9-54. DOI: 10.13140/RG.2.1.3515.8483.
- Gluchmanová, M. (2019a). Innovative Forms of Education in Technical Study Material. *TEM Journal: Technology, Education, Management, Informatics*, 8(2), 604-609.
- Gluchmanová, M. (2019b). Innovative Methods of Education for Development of Language Skills. *NORDSCI International Conference on Social Sciences. Book 1 / Vol. 2. Sections Education and Educational Research, History, Language and Linguistics, Philosophy, Sociology and Healthcare*, (pp. 59-65).
- Gluchmanová, M. (2018). LMS Portal Moodle in Technical Professional Language Teaching. *TEM Journal: Technology, Education, Management, Informatics*, 7(1), pp. 188-192.
- Gluchmanová, M. (2017). Creation of E-courses in English for Students of Production Technology. *TEM Journal: Technology, Education, Management, Informatics*, 6(3), pp. 613-617.
- Hanifa, R. (2017). Investigating English Teachers' Understanding of Materials Adaptation in Curriculum. *Tenth International Conference on Applied Linguistics and First International Conference on Language, Literature and Culture*, (pp. 319-324).
- Hubackova, S., Semradova, I., Klimova, B. (2011). Blended Learning in a Foreign Language Teaching. *Procedia - Social and Behavioral Sciences*, 28, 281-285. DOI: [10.1016/j.sbspro.2011.11.054](https://doi.org/10.1016/j.sbspro.2011.11.054)
- Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes*. Cambridge: Cambridge University Press.
- Klimova, B. (2017). Evaluation of the Blended Learning Approach in the Course of Business English – A Case Study. In T.C., Huang, R. Lau, Y.M. Huang, M. Spaniol, C.H. Yuen (eds.) *Emerging Technologies for Education. SETE 2017. Lecture Notes in Computer Science*, vol 10676. Springer, Cham (pp. 326-335). DOI: [10.1007/978-3-319-71084-6_37](https://doi.org/10.1007/978-3-319-71084-6_37)
- Lust, G., Collazo, N. A., Elen, J., & Clarebout, G. (2012). Content Management Systems: Enriched learning opportunities for all? *Computers in Human Behavior*, 28(3), 795–808. http://uait.pbworks.com/w/file/fetch/53312860/lust_cms_learn_oppot.pdf
- Marand, E. S. (2011). Adoption, adaptation, and development of language instructional units. *European Journal of Social Sciences*, 22(4), pp. 550-555.

- Neumeier, P. (2005). A closer look at blended learning – parameters for designing a blended learning environment for language teaching and learning. *ReCALL*, 17(2), 163–178.
- Rodrigues, C. (2015). Innovative material design/adaption ensures sustainable ELT. *Kuala Lumpur International Communication, Education Language and Social Sciences*, https://www.jesoc.com/wp-content/uploads/2015/07/Lan12_EditedFinalInnovative-Material-Final-Paper-for-Publication.doc-tbs.doc-Confirmed1.pdf
- Sharma, P., & Barrett, B. (2007). *Blended learning: Using technology in and beyond the language classroom*. New York: MacMillan.
- Simonova, I., & Kostolanyona, K. (2016). The Blended Learning Concept: Comparative Study of Two Universities. *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, Volume 9757, 9th International Conference on Blended Learning, Beijing; China, (pp. 302-311).
- Simonova, I., Poulova, P., Kostolanyova, K. (2016). Flexible hybrid learning: comparison of two approaches and learning results. *International Journal of Innovation and Learning*, 21(4), pp. 481-498.
- Simonova, I. (2018). Enhancing Learning Success Through Blended Approach to Learning and Practising English Grammar: Research Results. In S.K.S. Cheung, L.-f. Kwok, K. Kubota, L.-K. Lee, J. Tokito (Eds.), *Blended Learning. Enhancing Learning Success*, 11th International Conference, ICBL 2018, Osaka, Japan, July 31- August 2, 2018, Proceedings, (pp. 69-80).
- Smirnov, S., Ibatova, A. (2019). Training on professional foreign language for students of engineering specialties: Implementation of electronic technology. *Indonesian Journal of Electrical Engineering and Computer Science*, 18(1), pp. 301-309.
- Stracke, E. (2007). A road to understanding: A qualitative study into why learners drop out of a blended language learning (BLL) environment. *ReCALL*, 19(1), pp. 57–78.
- Teeler, D., & Gray, P. (2000). *How to Use the Internet in ELT*. Pearson Education Limited.
- Tomlinson, B. (2003). *Developing materials for language teaching*. London /New York: Continuum.
- Tomlinson, B. (2011). Introduction: principles and procedures of materials development. *Materials Development in Language Teaching (2nd ed.)*. Cambridge University Press.