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ABSTRACTS
Edited by
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FOREWORD

A regular collection of the materials of the Conference “Actual Problems of Education” MIP 2016 contains the abstracts recommended for publication by the Programming Committee. The authors of these abstracts are the academic staffs and other employees of different higher education institutions as well as the representatives of the partner organisations participating in the Conference. The abstracts and presentations concern both the problems of improving the quality of the education process on the basis of the latest pedagogical and information technologies and the issues of preparing future specialists and updating the content of the delivered disciplines with the aim of their orientation to the requirements of the present labour market of Latvia and Europe. The collection has retained the authors’ style and the original layout of the presented materials.
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Plenary Session
THE POTENTIAL OF MACHINIMA IN EDUCATIONAL TECHNOLOGY

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Keywords: machinima, educational technology, virtual world, virtual reality

Machinima, a video created in a virtual world, can be perceived as a universal and convenient teaching tool. It is perceived as an exciting emerging digital media, and a new frontier in technologies for designing and communicating compelling audiovisual narratives (Morozov, 2008). Its main assets are the low-cost production and the possibility to present situations which are difficult to shoot in real conditions. With the help of this tool it is possible to demonstrate various situations in almost every context. The ideas are limited with the teacher’s imagination only. Such an advantage encourages teachers to use machinima in different circumstances, in different subjects, such as foreign language teaching, biology (taught with content language integrated learning approach - CLIL), or even safety education.

Machinima is created in any 3D environment. Morris et al. enumerate four main methods of creating machinima (Morris, Kelland, Lloyd 2008, pp. 80-96):

• relying on the game's AI to control most action (is simple to produce, but AI-dependent results cannot be predictable and hence the script may be affected with unpredictable solutions);
• digital puppetry (machinima creators are virtual actors and each crew member controls a character in real-time, as in a multiplayer game); videos are recorded by orchestrating and recording avatars - animated 3D representations of people or other beings are manipulated as virtual and objects in real-time;
• recamming (which builds on puppetry, actions are first recorded to a game engine's demo file format, not directly as video frames; moreover, artists can then manipulate the demo files to add cameras, tweak timing and lighting, as well as change the surroundings);
• precise scripting of actions (scripting consists of giving precise directions to the game engine, but scripting capabilities may be limited or unavailable).

One of the social platforms, which can be appropriate for movie-making, is Second Life, which is a 3D world where everyone you see is a real person and every place you visit is built by the people just like you (Second Life,
2016). It can be noted that Second Life is making an impact in the academic world as it has unique features that potentiate collaboration, sharing, decision making, critical thinking and experiential learning in the virtual learning community (Macedo, Morgado 2016, p.1). However, it must be noted that using Second Life and recording the scenes, dialogues in there, requires the conditions such as an access to the 3D environment, specific skills on how to use this environment, special software for recording e.g. Camtasia, Fraps, as well as good equipment, also faster Internet connection and a robust graphic card, which is capable of supporting the highest resolution. All the conditions are crucial for working in the 3D environment and their fulfilment prevents any failures related to the technical side of the machinima production. The aim of the article is to provide a comprehensive overview of the machinima use in the classroom. The author will analyse three case studies in which teachers create various educational activities with machinima. The final part of the paper will be focused on the benefits and pitfalls of the machinima application in educational technology.

It must be stressed that the topic of machinima in language teaching and learning was broadly investigated within the CAMELOT project "CreAting Machinima Empowers Live Online Language Teaching and Learning", which was funded with support from the European Commission (Project number: 543481-LLP-1-2013-1-UK-KA3-KA3MP).

References
COOPERATIVE EXPERIENCE OF HIGHER AND VOCATIONAL EDUCATION ORGANIZATIONS IN LOGISTICS

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Keywords: cross-border cooperation, high and vocational education, “blue collars”, logistics, simulators, IT-technologies

Skilled professionals in logistics are either top level managers, or “blue collar” specialists. The first graduated from universities, the second ones are trained at vocational schools and centers. Moreover, universities develop new methods, technologies, especially information technologies- tools, which must be included in practice for everyday operations by former vocational students. Cooperation of the mentioned above educational organizations can provide better and productive study process of middle level specialists and more efficient and quick implementation of scientific achievements and innovations. Projects in the frames of international cross-border cooperation programs are a very useful instrument for such cooperation in the field of education.

Real effect and positive experience of such cooperation were received in two international projects: NEWLOG (Neighboring Programme of the EU and Russia “South-East Finland – Russia”) (Kuznetsov, Pimonenko, 2009) and LogOnTrain (2016) (ENPI Cross Border Cooperation Programme “Estonia-Latvia-Russia”).

The following organizations participated in NEWLOG project: The College of Professional Education Etela-Kyumenlaakso (Finland) and Admiral Makarov State Maritime Academy (Russia), as representatives of vocational and higher education institutions. The main goals, which had to be reached by this project, were as follows:

- harmonization of educational programs and advanced vocational training standards and unification of qualification requirements to the major specializations;
- development and implementation of the model of professional stuff training (with usage of simulators) for warehouses, stevedoring and logistic companies;
- foundation of an expert network of educational centers.

Development of educational programs and models were based on the survey of needs and demand of logistics business, and developers had taken into account requirements of ILO (International Labor Organization) to specializations included in the project: crane operators, signalmen, tallymen dealing mostly
with container cargo. Due to different reasons the third goal was not reached in full scale and volume.

The following organizations participated in LogOnTrain project: Valga County Vocational Training Centre (Estonya); Riga State Technical Scholl (Latvia); Latvian Transport Development and Education Association, representing Transport and Telecommunications Institute (Latvia); Petersburg State Transport University (Russia) and Saint-Petersburg State University of Telecommunications (Russia). Participants extend number in this project show the growth of interest to discussing problems on the part of the regional governance, business and educational organizations. The main objectives indicated in this project are:

- to enhance the level of transport, logistics and freight-forwarding training in vocational training, the training programmes should be updated according to the demands of modern international standards and needs of employers, and should be synchronised among schools themselves and also with the next level of studies (degree studies in colleges and universities) so that the brightest leavers of vocational school could smoothly continue their studies;

- to develop special qualification courses, exchange of experience, master-classes of university professors about the latest development in the field, new methods of training for trainers of transport, logistics, freight forwarding, warehousing, etc., in order to raise their qualification;

- to implement more widely simulation in training, which is very helpful for students before they take up real jobs; to include modelling and IT that are rapidly developing in the field of logistics and freight forwarding into training programmes;

- to create networks between local/regional transport/logistics business communities, local/regional authorities, vocational training schools and universities for needs improvement.

All goals were reached, and two results must be noted. After completion of the project there were issued: one manual “Information Technologies and Transport Logistics” and a few methodical recommendations for course assignment execution - for maintenance process management in transport and for completion of calculations for the discipline “Freight and cargo handling”.

The second important event is International Logistics Forum in Valga, which gathered a lot of attendants from organizations which did not participate in LogOnTrain project. At the Forum, there was shown a possibility of usage of the obtained results in the practical education, training and even work operations.

These two projects generated positive and efficient experience of joined and non-stop education in transport and logistics on the basis of high and
vocational education organizations cooperation. Now it is time for foundation of International Networking Center for further developments in the field of considered problems.

References

Scientific research and publication activities of a higher education institute (HEI) is closely connected with the teachers’ and all the staffs’ motivation of the institution of education. The HEI teachers’ motivational competence is considered to be one of the fundamental pillars of the institution quality and its education (Blaskova et al., 2014). Motivation is the presence of enthusiasm that drives the employees to put in extraordinary effort to deliver results (Keller & Price, 2011). The organization (HEI) is able to provide some certain conditions in under which there can be achieved a high level of motivation by offering some incentives, rewards and benefits and also opportunities for learning and growth (Armstrong & Stephens, 2008).

It is worth considering three main principal points for the development of the motivation system for the effective scientific work:

- systematic approach (the maximum possible harmonization of the interests of each academic staff member with the strategy of HEI);
- integrated approach (taking into account the main factors characterizing the work result);
- objectivity (the maximum possible independence of the performance appraisals of each academic staff member results from the colleagues and the heads of opinions).

The aim of the project is to understand the existing motivation of the TTI staffs regarding scientific activities (incl. writing articles in peer-reviewed journals), as well as to determine the points of growth (what is needed for productive scientific work). One of the tasks is to develop the "TTI Staff Portfolio" program which financially incentivizes the staff and the students of TTI to increase their personal publication rate and other research indicators.

Project tasks:

- conducting questionnaires about scientific activities and motivation factors;
- examining these questionnaires and making proposals for the motivating system of remunerations for the articles published in the reviewed journals.

Sociological questionnaires about motivation of staffs by scientific activities, about the number of publicized articles, about their subjective author
assessments, about what is needed for scientific work have been set in order to reach the aim and the decisions set in the tasks project.

The following plan of the project realization indicated:

• making a list of questions for sociological questionnaires (September 2015);
• conducting sociological questionnaires (October 2015);
• analysing the questionnaires results and presenting them to the TTI management for further development of the system of bonuses for the publications (November 2015).

During the work on the project forty three TTI teachers were surveyed. The authors will present their results of the qualitative and quantitative characteristics based on the analysis of a sociological questionnaire.

It seems that the research results are considered to be objective for understanding the TTI staffs’ motivation to conduct scientific activities and work out proposals which will determine the obstacles preventing the institute from the development of its scientific activities. To conclude, such projects should be developed in the institutions of higher education as an example of a good feedback system without which it is impossible to develop an efficient system of development and stimulation of the scientific activities. Such questionnaires should be carried out annually to trace the changes in thinking and scientific activities of the TTI staff.

References

Session 1

Theories and Methods of Teaching at a Higher Education Institution
STUDY OF THE NEW ACADEMIC SUBJECT ATTRACTIVENES

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Keywords: Master program, information technologies; data science, competence evaluation, internet portal

The research provides analysis of some study subjects related to the development of new master programs in Information Technologies, which is needed for establishing new contemporary and attractive program’s content (Krivchenkov, Misnevs, 2015). In the context of the increased workforce mobility and lifelong learning, the management and interoperability of data about what is really requested by academic and professional society are of high importance for both education and employment sectors (European Commission, 2010).

The first step in the decision making for a new academic program launching must be the assessment of the attractiveness of a suggested academic program in the dedicated professional area. There are a lot of different “attractiveness drivers”, but the most important and common for the university student and industry professionals is subjective evaluation of the program content. Formally the program content is defined by the study subjects included into the program (syllabus). In case of having a tool for measurement (evaluation) of the attractiveness of particular program subject it is possible not only to predict the applicants’ interest in the new program, but also to monitor quality of a separate subject during the program implementation.

The suggested technology and tool for the study of the academic subject attractiveness are based on the students’ and the industry professionals’ on-line surveys. Two different survey forms with 6-level evaluation scale were designed with multiple choice answers. One form was intended for the student survey and another one for the IT professionals’ survey. Test usage of the survey for innovative Data Science syllabus attractiveness evaluation was performed.

The discussed on-line technology was suggested to provide a survey for the evaluation of the new academic subject attractiveness as part of the developed Methodology for remote evaluation of competences in Information Technology. This approach will be implemented as a separate service on Software Engineering Competence Evaluation Portal (Misnevs, 2015).

The developed methodology will reinforce and accelerate the process of innovation in the European higher education by enhancing the universities'
capabilities by on-line evaluation of the study subject attractiveness both by students and IT industry professionals.

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References

AUTHOR’S CLASSES – THE IMPORTANCE OF INTERACTION OF THE HIGHER SCHOOL AND EMPLOYERS IN TRAINING THE HIGHLY QUALIFIED SPECIALISTS

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Key words: integration, quality, mobility, company, retraining, business

A reform of railway transport of Russia creates essentially new conditions of economic activity, imposes additional requirements to the experts working in branch, including graduates of establishments of professional education. Degree of responsibility immeasurably is increased in these conditions made by heads of any link of the railroad of decisions, their efficiency and expediency. Reform of JSC RZhD testifies the aspiration of campaign for activities for the European standards and the eurointegration processes.

In this article one of real steps to achieve this purpose is a realization of an educational program of additional professional retraining "Innovative management" ("Engineering business"). In the article the comparative analysis of education systems in Russia and the leading countries of the world is given. Also, the main trends in development of world and domestic education system of professional education in Russia and abroad, the purposes of implementation of the innovative program, the contents, personnel structure of teachers, indicators of the end result for subjects and objects of the program, its novelty are analyzed. The problems which have arisen during implementation of the program are designated. Forms and methods of the solution of these problems are recommended[1;2;3;4;5].

The innovation features of the program are as follows:
- the contradiction related to the substitution of terms "education" by "training" disappe-ars. On one hand, the state represented by the JSC Russian Railways will finance the program while ensuring the students’ employment, professional and career growth in the future. On the other hand, the students take on the responsibility for the state’s expenses compensation in the form of working for a certain period of time for the JSC Russian Railways. In addition, they spend their additional intellectual efforts and time for the program comprehension;
- the program is an exclusive example of a social partnership between the educational institution and the employer. The partnership is implemented in order to ensure professional and career development of students on a
competitive basis on one hand. On the other hand, the employer increases the competitiveness of its services due to the growth of its human resources potential. The educational institution enhances its image necessary to attract more students and expand its budget;
- the content of the program increases the mobility of young professionals in the labor market providing them with managerial competences. They are applicable not only in the field of railway transport but also in any other area of the economy including those of other countries. Thus, the competitiveness of individual professionals, businesses and the national economy is reinforced as a whole[6;7;8].

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ICT TOOLS SUPPORT OF ERASMUS+:
LESSONS LEARNED OF POLISH MILITARY UNIVERSES

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Keywords: Mobility-Online, Erasmus+, military mobility, international cooperation

The benefits emanated by international exchange programs are difficult to estimate. Each institution develops its own approach to the process of internationalization. Those values are known also for the youngest participants of European Higher Education Area - military universities located in Poland. Involvement of military universities in the internationalization has helped to achieve situation where vast majority of their academic community constitute civilian students. Civil-military universities in Poland offer the highest level of study programs, teaching and innovative environment which have to lead to education of European graduate. The awareness and responsibility about future alumni is particular care of international relation offices which are inspiration of innovation and internationalization. Opening military universities in Poland for exchange of students liberated the need of using professional ICT applications. Experiences and lessons learned of National Defence University in Warsaw in using the Mobility-Online are subject of further consideration.

References
THE CASE STUDY METHOD IN POST GRADUATE MANAGEMENT EDUCATION

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Keywords: case study method, teaching methodologies, management education

Having covered some ground in understanding the educational needs of the students, different methodologies used in TTI should be analysed with the objective of showing how each one of them helps lecturers achieve specific educational goals of the study courses. There are different interactive teaching methodologies available bearing in mind the educational objectives, such as “project activities, analysis of specific situations, business and role playing games, etc.” should be used in learning process (Pozdnyakova&Pozdnyakov, 2015). By the opinion of the author, case methodology is a more specific way for achieving educational objectives.

What a case is? In the literature we can find a lot of definitions of case study method. Some of them are “a description of an actual administrative situation”, “chunk of reality brought into the classroom” (Pons, 2009), “clinical research”, “case is written form viewpoint of the decision maker” (Ellet, 2007). In each definition we can find one common thing – any case is oriented to improve of practical knowledge and skills of the students, to prepare them better for working in real business world (Kuzmina&Sproge, 2015).

Case study method is an important tool in bringing the realities of complex business issues into the classroom. It offers executives the opportunity to immerse themselves in the decision making process and to extrapolate from the case issues to personal experience as well as to business realities they face in the own company. Case provokes rigorous thinking, challenges comfortable assumptions, stimulates engaging discussion, and jolts executives into real learning that matters in the real world (Kassarijan& Kashani, 2009).

The content of the research represents the following:
- Methodologies in management education;
- Case preparations;
- Study course design using cases (with the example of Financial Management course).

References


USE OF THE CASE METHOD IN TEACHING STUDENTS MAJORING IN MANAGEMENT AND ENTREPRENEURSHIP

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Keywords: higher education in management, case method, applied knowledge, skills, experience

After obtaining a bachelor's or master's degree in management or entrepreneurship, graduates usually have to start working in their specialty. Getting the desired position of manager or assistant manager mostly depends not only on the level of theoretical knowledge, but also on the level of applied knowledge, abilities and skills. University graduates who are planning to start a business also require not only theoretical but also applied knowledge. Applied knowledge in the field of management or entrepreneurship can be obtained in practice, but for students of these specialties it is difficult to organize effective practice while studying, so not every university manages to provide it. Often it is a lack of students’ applied knowledge, skills, abilities and experience which is a major barrier to obtaining the desired position of manager or creating a successful business start-up. Even in the case of employment or a business start-up a university graduate who did not get enough practical knowledge and skills is less likely to achieve success in his/her career and entrepreneurship. Strengthening the practical orientation of education in the field of management and entrepreneurship is to a large extent possible due to the use of the case method in the educational process. L. Shulman (1986) noted that the essence of the case method is the transfer of specific, well-documented and richly described events. Teaching materials from Harvard Law School (2016) define the case method as a technique in which the audience is offered a specific example from the world of business, to illustrate the specific situation in this example and to ensure discussion between teachers and students and the analysis of the situation. According to the materials, the sources of information to create a case are interviews or available sources of information, actual events or compositions based on the experience and knowledge of the person – data carrier. P. Hutchings (1993), as well as materials from the Science Education Resource Center at Carleton College (2016), note that the cases, as a rule, are based on real events. Harvard Business Publishing for Educators (2016) points out that teaching with the help of the case method immerses students in real business situations. Ekaterina Sadovskaya (2010) finds that the case method serves as a practical method of organizing the educational process, a method of discussion in terms of
stimulating and motivating the learning process. Based on an analysis of scientific publications and personal experience with various forms of the case method in teaching students in the field of management and entrepreneurship, two hypotheses have been considered. The first is that the case method is an effective method of training students majoring in management and entrepreneurship, of improving students' applied knowledge and skills. The second hypothesis is that there are various forms of case method application. An analysis of scientific publications, personal experience and the experience of our colleagues as well as positive feedback from students confirms the first hypothesis that the case method is an effective method of training and transfer of practical knowledge and skills to students studying in the field of management and entrepreneurship (hereinafter – the students).

In my opinion, one of the most effective ways to ensure that the case is close to reality is the direct involvement of the teacher in the events discussed in the case, that is, the participation of the teacher in actual companies as an advisor, consultant, project participant or in another capacity. In addition to receiving the applied knowledge first hand, the teacher may have a more detailed and in-depth understanding of the problems under consideration in the case, which increases students’ motivation and interest in working with this teacher, and therefore has a positive effect on the quality of the students’ knowledge and broadens their understanding of their future profession. Moreover, the personal experience of case method application in Latvia shows that students pay attention to the cases of local companies more closely.

In our view, one of the most effective forms of case method application is inviting entrepreneurs and managers to address the students with specific case studies. In addition to having other benefits from the use of the case method, students get acquainted with the situation from the original source, which inspires more confidence in the reality of the case and promotes both the attainment of applied knowledge and the refinement of professional orientation.

In my experience, the case method is also effective in pre-tests, tests and examinations. In this case, a student receives from the teacher a task to prepare a short case on the specific situation in management or entrepreneurship with which student has faced (in practice, employment or otherwise). This method can be used not only individually, but also in small groups, in which one part prepares and presents a case and another part of the group addresses questions to the student(s) author of the case and participates in the discussion, thus demonstrating the level of their knowledge. From this, we can conclude that there are various forms of case method application (or case method modifications), which confirms the second hypothesis.

The scientific contribution of this research lies in the compilation of information and experiences regarding the use of the case method in teaching
students of management and entrepreneurship. The practical application of the results and recommendations of this research will give universities and teachers an opportunity to significantly increase the level of knowledge and skills of students majoring in management and entrepreneurship. This will improve the quality of training for future managers and entrepreneurs, reduce barriers to their successful employment, and, ultimately, have a positive impact on the economic performance of actual companies.

References

PROBLEMS OF LABORATORY PRACTICUM IN PHYSICS AND WAYS TO SOLVE THEM

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Keywords: practicum in physics, credibility of results, student

Planning and carrying out of laboratory practicum in Physics is realized under the conditions of bringing teaching and practical tasks closer together when it refers to nature studies (Tàrtyp, 2009). Therefore the organization and control of laboratory works are utmost important. The work deals with the analyses of the above mentioned problem and searches the ways to provide solutions on the bases of the teaching experience at Tambov Technical University.

The biggest problems arise in the process of carrying out an experiment, processing its results and analyses, formulating conclusions and proving reports. The difficulties are caused by not understanding or not being able to do the above mentioned stages correctly and rationally.

Alongside with solving the basic scientific task (testing of familiar laws and regularities) the student also faces a methodological task: to learn the skills of using laboratory equipment, measuring methods and processing of the acquired results. First year students like former schoolchildren experience big difficulties in work with measuring devices, in processing the graphic or digital information data received, in analysing the results and evaluating their credibility, in formulating conclusions.

The ways of solving the above indicated problems lie in the factor that the student needs to acquire the following skills:

– when working with the experimental device: assembling the device due to the given scheme and control of the correct assembling of the scheme, understanding the measurement device functioning principle and their appropriate application;

– upon processing the measurement results: skills of applying the right methods to calculate the results and the ability to present them mathematically and in a graphic way;

– when analysing the gained results: comparative skills needed to compare the results against the well-known theoretical regularities or physical value indexes in manuals, and making conclusions about their credibility;
– when formulating conclusions: skills of making conclusions about the achievements of the targets set for the exact work based on the analyses of the results and the evaluation of their credibility;
– when delivering the report: skills of proving the correctness of the report and answers to teacher’s questions.

The teacher’s role is to organize student’s preparation and carry-out process of the practical work, assisting the student practically and controlling his work.

References

Session 1

Theories and Methods of Teaching at a Higher Education Institution. Assessment of Learning Outcomes
ON THE CURRENT ASSESSMENT OF THE STUDY RESULTS

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Keywords: mark forming aspects, the components of the final mark

Evaluation of study results – the assessment of the level of competence the student has achieved, and what level is planned for the particular educational programme (for the study course). Each educational programme and each study course has a set of study results – the knowledge, skills and abilities (competencies), the acquisition of which is planned in case of successful completion of the programme (course).

The results of study in accordance with the programme are determined on the basis of completion of the curriculum (passing all tests and exams in accordance with the curriculum) and the final attestation (the final exam and/or defending the thesis).

This work does not refer to the final mark; it analyses the marks which are received by students as a result of individual study of the course.

The Description of the study course has a component: Structure of the mark.

The author of the Description – the author of the study course has to solve the following tasks during the development of the structure of the mark:

1. The mark should include all components of the planned study result of the course (knowledge, skills, abilities, if they are announced as the expected study results).
2. The mark should reflect both the students work in the classroom (for all types of classroom work provided in the curriculum) and student’s independent work (the forms of self-study should be indicated in the Description of the course).
3. In accordance with the principles of the European Higher Education Area (Standards and Guidelines, 2015), the mark should be transparent, objectively justified and understandable for the student. This means that for each component of the mark it is necessary to establish not only the criteria, but also the characteristics of the evidence base.
4. The mark, if possible, should reflect the effectiveness of the educational process and on the basis of that the adjustments to the work of students and lecturers could be made in the course of study course without waiting its completion and thereby improving the quality of study results. This
means that it is desirable to have a current control of the process of mastering the course.

All mentioned above concerns the methodological aspect of the mark. Another aspect is “legal” one, namely:

1. What formal right does the lecturer have to put a particular mark? In particular, on what grounds he can deny permission for the student to have the test or sit the exam.

2. What evidence (justification) should be available to the lecturer in order to put the mark.

3. What are the formal consequences that the mark should have in order to make a decision on compliance or non-compliance of study results to the study requirements.

4. How these “legal” aspects of the mark and evaluation process should be drawn and published.

5. How and by whom the mark can be contested.

There is a third aspect of the evaluation of the course study results – organisational. Here, the following questions arise:

1. How to inform students and reach their understanding of the requirements for the results of study, the requirements to fulfil the curriculum provisions by the student, how to explain to the students the rules of assessment and structure of the mark.

2. How to plan the study of students so that they can accomplish all kind of exercises and independent work in the allocated time and receive the mark for the course.

3. How to plan the workload of the lecturer so that not only the classroom work and individual work with the students is taken into account, but also the working hours spent for the assessment of the study results.

4. How to create curricula so that they are harmonized with the mentioned Descriptions of study courses in the part of individual work and forms of study results evaluation.

The regulations of the institute for educational and methodical work provide answers not to all questions raised above.

It is necessary to update regulations for educational and methodical work in order to solve the indicated problems.

References

AUTOMATED TESTING IN FULL-TIME EDUCATION: HIGH-STAKES VS. LOW-STAKES TESTS

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Keywords: automated testing, assessment, high-stakes test, low-stakes test

Nowadays automated testing is a part and parcel of the education process. Custom automated tests, developed by teachers, are widely used both in MOOC and classical university courses. These tests serve different purposes, starting from the self-assessment of students during the learning process and ending with the final examination. On the base of the designed purpose, high-stakes and low-stakes tests can be distinguished (Butler & McMunn 2006). A high-stakes test is any test, which is used to make important decisions about students (i.e. final examination in classical university courses). A low-stakes test is used to maintain students’ discipline and identify learning problems. Typically, the results of low-stakes testing matter far more to an individual student and have no public consequences. Difference between high- and low-stakes tests is not in their forms (how tests are designed, validated, or organised), but in their purpose, so we leave the known problems of test construction out of this paper and assume the levels of reliability and validity of tests, applied for in empirical research, are identical.

When applied in useful ways, tests provide useful information about the learning progress as well as offering formative uses for learners (American Psychological Association 2001). At the same time, high-stakes testing has a number of widely acknowledged negative effects (Jones et al. 2003): higher levels of student anxiety arise; creativity and unconventional thinking are dampened; risk of dishonest student actions increases.

Now many universities have standardised the composite course grades that are formed from multiple components (attendance, homeworks, intermediate tests, etc.) all the course long. Frequently the final exam is limited to 50% or less of the final grade, leaving the significant grade part for the intermediate components. Having developed automated tests, teachers can utilise them for intermediate grading. Obviously these tests become high-stakes in this case.

Usage of automated tests as low-stakes (without significant effects on the final grade) can be a component of the formative approach to student assessment, which refers to procedures conducted during the learning process in order to modify teaching activities to improve student attainment (Sadler 1998).
This paper is based on the author’s experience of high- and low-stakes tests application within the course on probability theory and mathematical statistics, presented in the Transport and Telecommunication Institute in the autumn semester 2015. The course includes 20 automated tests (10-20 questions each); 3 tests are set as high-stakes (total 20% of the final grade) and other 17 tests as low-stakes (total 10% of the final grade). General conclusions can be summarised as follows:

1. Low-stakes testing allows checking the students’ motivation and identifying the most motivated students.
2. Low-stakes tests slightly improve the students’ learning discipline.
3. High-stakes tests do not outperform low-stakes tests in the students’ motivation and preparedness.
4. Cheating rates are very similar for low- and high-stakes, although low-stakes testing were administered with lax security.

These conclusions are generally in line with the existing practical findings (Phelps 2007), but a deeper analysis of the discussed practices in different courses is recommended.

References

THE PROBLEMS OF KNOWLEDGE ASSESSMENT OBJECTIVITY

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Keywords: test control, advantages, disadvantages, stressogenic, individuality, divergent thinking

One of the most important directions of educational system standards improvement is the perfection of education quality control (ESG, 2015). Knowledge assessment objectivity is in the list of the main requirements to the modern educational environment which is necessary for obtaining efficient education (Карпенко, 2015). One of the most objective methods of knowledge control is the method of test control (Желнин, Кудинов, Белоус, 2012). However, this method possesses some serious disadvantages which do not allow to rely on it entirely (Тинякова, 2013). This knowledge assessment method does not take into account psychological aspects of learning activity (Реан, Бордовская, Розум, 2010) and can not assess objectively learners’ abilities to divergent thinking, which is a must for creativity in the modern conditions of the postindustrial society (Robinson, 2010).

Time has shown that the testing system of knowledge control has been integrated into all levels of education and has become a rather successful tool for teaching and checking students’ qualification skills. But one way or another, any system of control has its pluses and minuses, and testing is not an exception.

The benefits of testing include standardization of conditions and results, efficiency and cost-effectiveness, reliability and fairness.(Лучинин, 2015). Testing efficiency with the use of information technology and economic efficiency is particularly important in the processing of the examination results for a large number of examinees (Желнин, Кудинов, Белоус, 2012).

Two aspects can be attributed to the positive features of testing. The first aspect is the possibility of covering all specific disciplines (Желнин, Кудинов, Белоус, 2012).

During the speaking exam, the teacher can not spend much time checking the knowledge of the student. As a rule, the speaking exam allows the teacher to ask students questions covering no more than three themes. Another advantage of testing is a more adequate scale of testing.

According to the teacher, there are following disadvantages in this system of control:

- the problem of duration, labour input and thus the high cost of designing tests;
the danger of “blind” (automatic) answers while doing multiple choice tasks. This allows students to get an undeserved grade.

There are disadvantages in the method of testing for students as well. This fact does not allow to limit the diagnostic of students’ abilities and knowledge exclusively to testing:

- flaws in the test design;
- the danger of ‘blind’ (automatic) errors as a result of stressogenic – predisposition of an individual to experience stress (Лучинин, 2015). Testing causes certain anxiety in students, as there is no trustworthy environment. Moreover, if the emotions are envolved, then psychological factors of this learning activity have to be taken into consideration.
- the impossibility of revealing personality – the ability to specify the answer with examples, the knowledge of facts, the ability to speak your mind logically and back up your opinion (McMillan James, 2000).

In addition, such a method of knowledge assessment is not objective in the assessment of the ability of divergent thinking (Robinson, 2010) and does not contribute to the development of such thinking.

Divergent thinking is the ability to find various possible solutions, the ability to interpret the task conditions in different ways, the ability to think horizontally, not only linearly or perpendicularly. Divergent thinking is an indisputable component of creative thinking. At the heart of this thinking there is imagination, but its essence lies in the ability to see a great number of solutions of one problem and interpretation of one and the same issue (Robinson, 2010).

Thus, not all necessary characteristic of learners’s knowledge especially those with divergent thinking can be obtained with testing. It means that testing should obligatory be mixed with other (traditional) forms and methods of assessment. Based on a review of literature and her own experience, the author suggests methods of examination for students with divergent thinking.

References


INTERNATIONAL LANGUAGE EXAMS:
CHALLENGE OR ANNOYANCE TO SCHOOLS
AND UNIVERSITIES

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**Keywords:** international language exams, language proficiency, integrated skills development, professional development, lifelong learning

Exam-oriented language teaching has issued a challenge to the language teachers and raised a number of questions: What is necessary to do in the language classes at schools and universities? Is the only task of the teachers to develop the relevant exam skills and help their students to sail through the exams? Or is there a great chance to kill the annoyance and boredom, elaborate the ways of getting the maximum benefit of the international exams scales, materials and activities, to promote learners’ autonomy and assist them to be ready for lifelong learning?

The goal of the present research is to study and analyse the potential of the international language exams materials and assessment scales, their perspective use in language classes and self-study in order to raise learners’ motivation and autonomy and promote teachers’ professional skills contrary to the commonly accepted exam-oriented approach and exam skills training in language classes.

The available online international language exams materials with a great variety of the tasks and activities on reading and listening comprehension, writing and speaking skills development can be in stock of any language teacher (Cambridge English, 2016; ECL, 2016; Exam English Home Page, 2016; IELTS, 2016; Pearson, 2016; TOEFL, 2016). Besides that, to make the learners more confident and motivated it is sensible to offer them to reveal their language competence level using the free online interactive tests (Exam English Home Page, 2016), trace their progress of acquiring the language during the course or self-study, identify their strengths and drawbacks and help them to eliminate their weaknesses. Playing a role of facilitators, the teachers can show the ways their students can go along while studying a foreign language/foreign languages and develop their autonomy, i.e. an ability to learn a language/languages independently.

Apart from the well-known General and Academic English Exams including Cambridge ESOL, Pearson English Learning System, IELTS, TOEFL, ECL, etc., there exist a number of the Professional English Exams. In particular, Cambridge ESOL, which history dates back to 1913, offers the
exams on Business English: BEC, BULATS, Financial English: ICFE, Legal English: ILEC as well as the exams for EL teachers: CELTA, TKT, Delta, and others. (Cambridge English, 2016). Moreover, Cambridge ESOL has compiled special exams for school children and young learners that can be of the definite interest of the school language teachers (Cambridge English, 2016), taken into consideration that many international language exams have been officially recognized by the national education institutions and authorities and can substitute the mandatory secondary school leaving exams (Cambridge English, 2016; ESL, 2016).

As the aim of all the international exams is to identify the level of the language competence, the exams results have been correlated with the language proficiency scales of the Common European Framework of Reference for Languages, CEFR. (Common European Framework, 2016). It means, while working with the international language exam materials, learners can understand what they can cope with and what skills, competences they should build up to reach the proficiency level they need or just wish to have.

Concerning the language teachers, the analysis and practical use of the international language exam materials not only assist to comprehend how the system of the international language exams functions, but it can promote teaching skills, strategies, and competences.

Thus, besides pre-exam training and mock exams, the teachers and learners can use the materials of the international language exams for self-development and lifelong learning, taking a challenge and struggling with the annoyance of exam-oriented education.

References

PARADOXES OF METHODOLOGICAL WORK
IN COMMERCIAL INSTITUTIONS OF HIGHER EDUCATION

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Keywords: methodological work, tutor’s contact work load, remuneration of labour

Methodological work is a necessary and important part of the activities of the academic staff at any university. It is a set of actions and procedures oriented on:

- provision of the educational process with academic and methodological documentation,
- advance of pedagogical skills of academic staff,
- improvement of students’ classroom and independent work,
- perfection of all types, methods and content of academic work.

The principal goal of the methodological work is creation of conditions facilitating the efficiency and quality of the educational process.

Efficiency (Lopatnikov, 2003) is one of characteristics of quality, which is not single, but one of the most important. Regarding the educational system, there is the reason of the fundamental paradox of methodological work: the subjective methods of assessing the quality of the educational process while employing the quantitative methods for determining its efficiency; it is considered from the economic point of view only at private universities.

The goal of this research is retrieving the opportunities of applying the normative method of expenditures calculation to methodological work accomplishing. The urgency and topicality of this research is determined by the paradoxes, quite often taking place at the private universities. These paradoxes are as follows:

- educational and methodological work requiring the direct contact of the tutor and the students, such as tutorials, sitting the examinations and tests, advising the coursework, checking the tests and essays, is not referred to the contact load of the lecturer, but only to the so-called “other loads”, which is not considered in the process of calculating the remuneration of the lecturer’s labour;
- lecturer’s methodological work in the process of preparation for classes is not planned and is not taken into account; nevertheless, such work is the essential principal condition of both improving the quality of academic work, and progress of pedagogical mastery;
the differences in the amount of labour required and involved in preparation of the study courses are not taken into account in the process of planning and estimating the methodological work: whether it is a brand new (for university) study course or the course which already exists but is entirely new for the lecturer, or the regular course repeatedly delivered by the lecturer.

The result of the research under consideration is specified proposals for labour remuneration; it includes the differentiated standards for a wide range of types of methodological work. These standards are aimed at facilitating the basic principle of reward: equivalence of remuneration and labour quantity and quality.

References

ANALYSIS OF MODERN ACCOUNTANT’S COMPETENCE FORMATION IN HEI

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Keywords: competence, market of educational services, modern business environment, HEI study programs, practical skills

The development of the market relations was the reason for turning the education, which had previously been a benefit and privilege paid by the state, into the intangible service provided by educational institutions at various levels.

The purpose of training Accounting is the acquisition of skills of comprehending the economic processes, the ability to analyze and organize these processes.

Formation of professional competences of accountants in higher school involves such approaches towards the organization and content of accounting education, which allow creation of skills and competences for the trainee, as well as teaching a student to perform the professional tasks. The successful solution of this problem is possible with understanding a number of specific features of the professional activities of accountants, and its methodological solution is provided by modeling the professional activities in the educational process, both during training and at the stage of monitoring the results.

The research under consideration allows noting that gender differences have a significant impact on the choice of the study areas. To reduce the background for professions segregation the project “Reducing causes of segregation of occupations” was implemented within the program of the European Community EQUAL (Valsts izglītības attīstības aģentūra., 2015).

The research “Study of professional plans of the 12th grade students” demonstrated that stereotypes continue affecting the choice of profession (PKIVA, 2015).

The number of students receiving the higher education by the programs of Accounting Course, both full time and part time study, was 1480 people in 2014/2015 academic year; this amount is slightly more than 2% of the total number of students in Latvia (LR Izglītības un zinātnes ministrija, 2015).

The high level of competition in the market of educational services, as well as the Bologna education system requires the transfer of emphasis from the content of education on learning outcomes (The Bologna Declaration, 1999).
Professional competences of the specialist in Accounting are based on the research paradigms existing in this area of science. Therefore, the purpose of the training the specialists in Accounting at the university is formation of his professional competence and obtaining the skills necessary for accomplishing the professional tasks.

The results of the research devoted to the quality of education show that usage of the computer in the process of learning is more efficient compared to the classic forms of training (Meister, 1998).

The modern training methods focus on comprehending the ideas, theories, and concepts by the students, not just memorizing them.

The role of modern teaching methods is to prepare a future specialist, capable of accomplishing his/her professional duties immediately after finishing his/her training.

The author of this study believes that the innovative educational technology should be characterized by the set of three interrelated components: the actual contemporary content, which is transmitted to the students; active teaching methods and appropriate system of assessment and monitoring of educational outcomes of the learning process, and the availability of modern infrastructure (assets) for provision of the learning process.

The implementation of the proposals contained in the study allows preparing the competitive competent specialists with higher education in the field of Accounting.

References

RESEARCH OF TTI STUDENT’S VALUE ORIENTATIONS AND ITS INFLUENCE ON TEACHING TECHNIQUES

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Keywords: informational, society, values, teaching, skills, methods

1. The term "the informational society" means a form of social organization in which "the generation, processing and transmission of information have become fundamental sources of productivity and power" (Кастельс, 2000).

2. At the end of 2015 I made a poll to identify the value orientations of students of the Transport and Communications Institute with the aim of research their attitude to the basic values of informational society. It surveyed 20 students from 5 groups of final year undergraduate of the Faculty of Computer Science and obtained the following results.

3. Interesting work was valued higher than earnings by 70% of students.

4. Spiritual harmony with colleagues attaches importance of 80% of the respondents, half of them thought it was very important.

5. Individual work is preferred by 50% of respondents, that caused, presumably, the specifics of the programmer’s profession.

6. 75% of the respondents attend Social Networks, 70% of them on a daily basis. Among those, who visit social networks, three-quarters are active (place comments).

7. In open source projects only 5% of respondents are involved, but 50% plan in the future to participate in them. However, 60% of the students are treated with respect to the participants of open source projects.

8. The poll was laid to identify inappropriate responses. In particular, 20% of respondents prefer to work individually, but a spiritual harmony with colleagues is considered to be important or desirable. 5% of respondents prefer teamwork, but believe it is not necessary to have a spiritual harmony with colleagues.

9. Thus, more than two thirds of the respondents share the basic values of the information society — collectivism, the priority of the spiritual principle, the participation in social life.

10. This confirms the findings of my previous report (on MIT-2015) on the priorities of teaching methods in the new social conditions: in the educational process, it is desirable to carry out practical training in the form of group projects, as well as to practice discussions on problematic situations in a dialogue with the students.

References
Session 2

Modern Higher Education: Distance Learning Experience, Information Technologies
DISTANCE STUDENTS' GROUP WORK METHODS

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Keywords: distance learning, group methods, video conferencing system, electronic text, educational technologies

Modern higher education is characterized by the active introduction of new effective methods of teaching. Methods used in distance learning complement traditional ways of teaching. Activity of students in distance form increases a lot when teacher is actively engaged in educational working process as well.

At the University for work with distance students, studying humanities, within the course “Modern Informational Technologies” group work form in big groups of students (10-12 persons) and small groups of students (3-4 persons) is fully applied. Group work methods, used by teacher in distance learning courses, are realized with:

- educational resources and elements in Moodle system: forums, glossaries, wiki;
- video conferencing system Blue Jeans;
- Google applications.

During the process of using group teaching methods, students work with electronic texts, photographs, presentations.

Students’ quality assessment system of group work in distance learning courses is developed in the University on basis of tutorial certification criteria. (Соколова, Пупцев, Солодовникова, 2013).

Great help for a teacher in organization of group work is given by universal educational technologies: method of projects, educational workshops, methods of working with heterogeneous (non-uniform) and homogenous (uniform) groups of students (Пупцев, 2014).

Today work on improvement of group methods of education in distance form continues.

References
INTERACTION WITH THE STUDENTS OUTSIDE THE CLASSROOM & INTERNATIONAL DISTANCE LEARNING

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Keywords: Interaction, Academic Performance, Learning Communities, Distance Learning, Learning Outcomes, Assessment

Professors encourage and expect students to learn outside the classroom; in fact, 80% of the learning occurs outside the classroom (Endo, Harpel 1982). Now it is of paramount importance to address the following questions: How should professors teach students and interact with students outside the classroom (Pascarella, Terenzini 1978)? How should professors get started? What opportunities and resources are available to professors (Theophilides, Terenzini 1981)? How should faculty encourage students to come to office hours and how should faculty increase and retain the attendance during office hours? By how much percent will these new innovative ideas increase the class attendance and enhance the students’ academic performance? How to extend our teaching boundaries outside the classroom and internationally? What new challenges will professors experience (Theophilides, Terenzini 1981)? How will this change and affect professors’ future teaching style(s)?

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BLENDDED LEARNING. PROBLEMS AND SOLUTIONS

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Keywords: Distance education, blended learning, program implementation, learning content, on-line course

The article is based on the experience of implementing the strategy and the main ways to further development of distance education at the Transport and Telecommunication institute (hereinafter - TSI) described by the authors in (Мишнев et.al. 2013) and analysed in the article summarizing a 6-year experience of distance education implementation in TSI. (Ozoliņa et.al., 2015).

The authors have examined the experience of E-learning solutions implementation at TSI, developed the MOODLE application platform and have analysed the results of its implementation (Fila & Misnevs, 2008).

The article mainly focuses on the further development of distance learning - the convergence of all types of studies: full-time and extramural studies with the growing penetration of elements and technologies of distance learning. This new type of education can be called blended learning (Nosova, 2011). Blended learning is a thoughtful fusion of face-to-face and online learning experiences (Garrison et.al, 2011). Blended learning has been getting extensive use in TSI since the 2015/16 academic year.

The authors have identified some problems of blended learning implementation and have described ways to solve them (Nosova, 2011).

Based on the analysis of global experience of systems and principles of distance learning organisation, certain changes and innovations in the distance learning system of TSI have been made. Some of them are summarized in interim annual and semester results.

Innovation includes a relatively new model of learning organisation, which is typical for many leading universities in the world.

Problems of implementation of blended learning are as follows:
- not 100% synchronized plans of extramural and distance education, students may have difficulties in changing the mode of education;
- not qualitatively synchronized content of courses for extramural and distance learning;
- a huge role of human factor in case if the lecturer and the author of the course are the same person.

The authors the following solutions for more qualitative and reasonable implementation of blended learning:
- to transfer part of the courses of free choice (C block) to distance study, thus introducing online technology for full-time students;
- to provide both full-time and extramural students with the opportunity to study certain courses remotely;
- to compensate hours’ saving for extramural students with a wide provision of materials, lectures and tasks electronically;
- to implement student-oriented approach - hence the university turns to students, listens to their opinions (questionnaires), provides flexible learning and course passing opportunities;
- the use of distance education technologies can greatly improve the perception of learning material through the use of visual materials and testing modules, providing an objective assessment of knowledge and skills of the students.

References

MAIN CHALLENGES FACED BY THE LEARNIT PROJECT MANAGEMENT IN THE PROJECT IMPLEMENTATION PROCESS

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Keywords: LEARNIT, research, project management, resources

The European Research Area was launched in 2000 (COM(2000) 6 final, 2000), for implementing the Lisbon Strategy. Modern higher education linked to research and innovation plays a crucial role in maintaining economic growth and prosperity, in promoting individual and social progress by providing the highly skilled human capital necessary for knowledge-based economies (COM(2013) 499 final, 2013). Nowadays, more and more European higher schools are engaged in international research projects. Such projects make a valuable contribution to the development of an academic institution.

Partnership of three higher education institutions from three countries was organized to implement LEARNIT international research project: WSEI (University of Economics and Innovation, Poland), KVK (Klaipeda State College, Lithuania), and TSI (Transport and Telecommunication Institute, Latvia). The innovative solution proposed by WSEI in the framework of LEARNIT project is aimed at improving efficiency of learning mathematical content by the stimulation of the level of concentration accordingly to personal rhythm of a student. The main results of the implementation of LEARNIT are supposed to be the properly equipped Learning Lab and software for mobile devices intended for enhancing the effectiveness of the learning process by stimulating students’ concentration.

Management of LEARNIT project is supposed to be a complex process that demands integration of various resources, pedagogical and managerial practices, as well as common efforts of different people involved in the project: scientists, managers, teachers, IT specialists and students. The major challenges faced by managers and researchers responsible for LEARNIT project can be summarized as follows:

1) LEARNIT is a multidimensional cross-disciplinary research project that engages people of different professions and positions.

2) Students are supposed to be actively involved in its major activities, the project results being to a large extent dependent on the students’ contribution to the project.
3) The project demands integration of all available resources – administrative, technological, educational, etc., which are heterogeneous in nature.

4) The temporary nature of the project organization is also a big challenge for LEARNIT managers.

5) Due to the complicated nature of the project partners must assess their progress and establish a set of qualitative and quantitative indicators to be used on a regular basis.

6) Projects involving ICT are usually quite sophisticated and demand special attention from project managers.

7) LEARNIT project is implemented by three higher education institutions, so the project management occurs at different levels. Project Leader (WSEI) is responsible for the entire project management, delegating and assigning tasks to partner institutions. Project partners perform special tasks assigned to each partner in the bilateral agreement. This also requires proper coordination of all project activities.

LEARNIT project implementation occurs across different functional areas of the Institute. In the process, managers use an arrangement of integrated resources, which are aimed at achieving sustainable project performance. In the context of LEARNIT, special emphasis is be given to generating and sustaining excellence of its technological, educational and research constituents. The actions to be taken for accomplishing sustainable project performance are specified in the overall project plan, which forms the basis for the project management efforts related to successful project implementation.

References


Session 2

Modern Higher Education: Educational and Cognitive Activities of Students
INTERNET OF EVERYTHING AS A DRIVER OF IMPROVING IT STUDY PROGRAMS

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Keywords: Internet of Everything (IoE), study program

In a very short time, the Internet has dramatically changed our learning, working, living and playing environment. Using existing and new technologies, we are connecting the physical world to the Internet. It is by connecting the unconnected that we move from the Internet to the Internet of Everything. The IoE incorporates four pillars to make networked connections more relevant and valuable than ever before: people, process, data, and things. The information from these connections leads to decisions and actions that create new capabilities, richer experiences, and unprecedented economic opportunity for individuals, businesses, and countries. (Cisco Networking Academy, 2015)

As analysts and industry experts say, the market could also create demand for a new kind of IT specialists — those who can both engineer new products and process the collected data. A 2011 McKinsey report estimated that the United States faces a shortage of 140,000 to 190,000 people with deep data analytics skills, and 1.5 million managers and analysts to make business decisions based on their findings. (Ravindranath, 2014)

Because the IoE technologies are rapidly gaining popularity, as well as responding to the market demand, the author proposes to use this fact to the study programs updating and improving. The author recommends to consider the new disciplines, interdisciplinary approach, learning outcomes and new IT specialists training for improving of study programs.

References

HOW TO DEVELOP STUDENT SURVEY RESULTS IMPACT ON STUDY COURSES AND TEACHERS' WORK

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Keywords: student survey, teaching quality feedback, teaching management feedback

The purpose of the Student Survey is to provide teachers with a meaningful feedback about how their practice impacts student learning and to incorporate student's voice and experience into the efforts to improve learning. Whereas administrators can only be in classrooms during a limited number of hours each year, but students spend hundreds of hours with teachers.

Discussion questions in Survey of results:

• Are student surveys valid measures of the teacher's practice?
• How could student survey results be used by the teachers and the administrators to enhance the teachers' evaluation process? (Dr. Kelly J. Burgess)

Survey questions should be organized by four elements:
- Student Learning;
- Student-Centered Environment;
- Classroom Community;
- Classroom Management (The Colorado Education Initiative, 2014).

Giving feedback to teachers is a new process for many students, so it is important to talk to them about what a survey is, how this one will be used, and finally, ensure that they know that their confidentiality will be protected. Do students take these surveys seriously? Rarely has the time to go into this deep to measure all trainers and write your opinion.

There are many ways that the results can be used to inform teacher, school etc. Some options include:

• As a formative tool. (for example: Teachers can use results as a formative tool to reflect on their practice, complete their self-reflection, and create goals (OECD, 2009));

• As part of teacher evaluation (The Colorado Education Initiative, Education, School, and Academic Online Surveys).

Analyzing the Latvian Universities survey main recommendations for a Good Students Survey:

1. Clearly defined objectives for Survey. In the student questionnaire form there should not be no question whether they have knowledge of the subject of study in teaching?
2. Short and focused. Make sure each question brings you closer to your goal. Be mindful of survey takers’ time, and word the questions clearly. A good rule of thumb is your survey should take no more than ten minutes to complete.

3. Rating scale questions consistent. If you’re using rating scales, use the same points system throughout your survey. If 1 means “extremely satisfied” and 5 means “extremely dissatisfied,” maintain this scale for all questions.

References
SOME METHODS TO IMPROVE STUDENTS’ MOTIVATION TO LEARN

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Keywords: student motivation, educational motivation improvement

Social and financial situation has changed a lot in Latvian educational system, and this has led to a decrease in the number of applicants and students. In this situation universities had to decrease expectations of students’ examination results level and accept them, which, in its turn, lead to a decrease in the level of requirements to them. As a result, some contemporary students have a lower level of education, and what is even worse, a very low level of study motivation. Numerous researches carried out in various universities, have concluded that students displayed individualistic features and complacency, unwillingness to take responsibility, and also the lack of planning and forecasting their professional future (Кудринская, 2012; Moore et al., 2008).

The objective of modern education is not so much the transfer of knowledge, but the development of self-learning opportunities, creative processing of the information received, the expansion of competences. Studying in this situation presumes independent work of students. However, students, distinguished by lack of motivation, are not willing to be engaged in the educational process. As a result, the examination often turns not into the demonstration of knowledge, but the demonstration of lack of qualification and knowledge.

To improve this situation, the teacher should work to improve students' motivation to learn.

The problem of motivation is widely covered in the pedagogical literature. Many researches in this field are devoted to the study of the key components that determine the motivation of students: students as subjects and objects of the educational process, the teacher, curriculum content, teaching methods, educational environment, etc. (Williams & Williams, 2011; Панина, Вавилова, 2008).

Interested in the problem of students' motivation, we do group discussions with the students, monitor the dynamics of their motivation. An integrated assessment of the subject matter is one of the ways to improve students' motivation to learn, which is already applied and has been widely
used in Transport and Telecommunication institute. Unfortunately, practice shows that this method does not produce the best results in all situations.

Another way to motivate students is systematic control of knowledge acquisition, which is preferably to be conducted at the beginning of each practice or laboratory studies. Control could be performed by doing a test, which is usually placed in the Moodle system. The advantage of this type of control is that it is carried out quickly and objectively as a teacher is excluded from this process. A student gets an opportunity to look at the sufficiency or insufficiency of his/her knowledge level to perform a scheduled subject study.

Usage of active learning methods, including simulation game is another way to improve students' motivation to study. For example, within the framework of laboratory work students can be given the task to manage the railway model or control robots that perform specific, elementary steps. These techniques allow to turn laboratory work into the sort of game and increase students' interest in this area, which in turn may stimulate their independent work in this direction.

Good results can be also obtained in the classroom if the following forms of active learning are used: the discussions (brainstorming with or without), programmed instruction, problem lectures, problem solving seminars and trainings, business and role-play games, and methods of generating ideas, etc.

As a result of applying active learning methods, students have the opportunity to develop their competences to solve the problem, assess the practical value of the material under study, to consolidate the knowledge and develop the skills of their practical application. As a result, the learning process becomes more interesting and effective. In its turn, the formation of professional competence, preparation of students for their professional activity, stimulation of creativity and activization of cognitive activity are productive tools for improving motivation to learn.

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The aim of the given report is to focus on the main motivators of students’ independent work or, to put it simply, on what makes students responsible for doing their home tasks. We all know that independent learning has always been one of the man’s richest life properties and it is impossible to master a regular school or high school subject, be it exact or humanitarian science, without independent work. In our case we’ll point out the main motivating factors in taking a foreign language course where persistent independent work becomes vitally important.

Scientists suggest (Dornyei, 2001) that successful independent learning depends on a number of external and internal factors. External factors involve the creation of a strong relationship between teachers and students and the establishment of a supporting environment. It is clear that teachers play a key role in establishing such environment. Internal factors are supposed to be the skills that students have to acquire, their self-discipline and self-regulating and collaboration with teachers in structuring their learning environment. Along with providing regular class work, giving students proper home tasks appears to be one of the dominant components of the teaching-learning process.

The author of the report has made some observations over the students’ work, their performing home tasks in particular, during one semester period (TTI) which have allowed to state the following. When giving a home task to his/her students the teacher should, first of all, insist on writing it down, otherwise the students are bound to forget about it. And the note made in writing will serve as a motivating reminder. The next important thing is to explain the necessity of doing the home task for being confident and successful at the further workshop or seminar. If it is a special grammar task the teacher should emphasize the importance of consistent grammar learning. Confidence in further success and the teacher’s interest in this success will serve a good motivator. It is also valuable when the teacher differentiates home tasks according to the individual students’ skills and gives a more detailed explanation to those who need it. Such practice adds to the establishment of the supporting environment and to better cooperation between the teacher and the students because the latter appreciate good attitude and react adequately (Gardner, Lambert, 1972). And the last but of course not the least thing, in our
opinion, is the assessment of the performed home tasks. It is desirable that the students get marks for their work that will serve a strong motivator.

Thus we can say that all the above mentioned factors appear to be active motivators of the students’ independent work.

References

It is hard to underestimate the importance of good referencing and correct citation. Insertion of a direct quote in an informational, publishing or analytical material is a way to make the text objective, serious and trustworthy. Referencing in scientific literature is especially important, as it makes them interesting and multifaceted along with making their conclusions substantiated and factually correct. Good referencing serves the following functions:

• Interaction: a dialogue among scientists is only possible if it is based on identical sources of information that are accessible to everyone;
• Ability to fact-check: statements that concern scientific facts must be able to undergo verification; this is possible if the sources are referenced;
• Protection of the right to intellectual property: each author has intellectual property rights and their economic realisation;
• Protection from plagiarism: authors are protected from recreation of their research and views in a distorted way;
• Protection from incorrect information: the public and students, would like to be protected from charlatans who’s views are not supported by hard facts (Bonzac, 2004).

Science as a social system could not be conceived and thrive without a correct referencing system that withstands scrutiny. Mistakes in citation are unforgivable. “Thus, a standardized method of referencing that follows strict guidelines presents a formal alpha and omega of any scientific work” (Rota, Streitle, 1988).

Majority of universities have webpages dedicated to instructions about producing written work. This work is a part of further education programmes, for examples, undergraduate projects, different types of essays, reviews, annotations etc. A compulsory component of the guidelines is a mention of reference formatting (Denisova, 2011).

As a rule, any requirements for reference formatting are a variation of two basic systems: Harvard (which also has two variants) and Vancouver.

Traditional Harvard referencing style (also known as «author–date») consists of the cited phrase is followed by initials and surname of the author,
followed by a coma (or initials and surname of the first author and et al., if there are several authors) and the year of publication, the bibliography of the work ordered in alphabetical order. There is a different variant of the Harvard system («alphabetical - numbered»), that replaces the author’s surname and year of publication with a number of the referenced publication (that is enclosed within square brackets) from the bibliography that is constructed in alphabetical order.

The Vancouver system involves insertion of Arabic numerals after citations. These numbers correspond to the numbers in the bibliography list in order of appearance of the citation in the text, either in parentheses, square brackets or superscript (Kirilova, 2014).

The Harvard System is a method of referencing documents created by others. It usually combines in-text parenthetical citations with a bibliography. Its roots go back to 1881 when a Harvard scientist, Edward Laurens Mark, included a citation within parentheses in a paper on the garden slug. This system is popular in the fields of social science, science and humanities (Sherwood, 2013).

The proposed research carries out analysis of citation that master’s degree students of Transport and Telecommunications Institute used in their primary theses (“Research and Technology – Step into the Future” conference). These theses are, in most cases, first experience of scientific publication for the master’s students. During this introductory period, correct use of Harvard referencing system should lay a solid foundation for future scientific publications.

The research also selectively analyses formatting of graduate student theses of Transport and Telecommunication Institute for the 2014-2015 academic year. The point of enquiry is use of references and formatting of the list of information sources.

To improve the standard of formatting of graduate theses and other deliverables, it is necessary to introduce the students to the Harvard system of referencing during their first year of education, possibly during the module that introduces them to the specialty. Thus, by the time the students reach graduation, they will have a vast experience in using reference system, which, in turn, will simplify the process of writing their graduate thesis. Some will view this step as a their first insight into scientific publication creation.

References


EDUCATIONAL AND SCIENTIFIC LABORATORY TASKS FOR MODELING THE MECHANISMS, MACHINES AND MATERIALS

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Keywords: laboratory, modelling, science, students, creative abilities

In order to enhance the educational and scientific-research activities in the field of mechanical engineering at the Transport and Telecommunications Institute, there was established a Laboratory of modeling the mechanisms, machines and materials. The main directions of the activities of the laboratory are defined as constructive simulation, modeling of gas dynamics, reliability-diagnostic modeling and simulation of the behaviour of materials.

The scientific objectives of the laboratory: are to attract the teaching staff of the Institute to the tasks of solving problems of modeling of behaviour and diagnosis constructions, gas dynamics and flow parts, modeling the behaviour of materials; to use questions in order to solve these problems in practical classes with students, draw up the results of the work in the form of publications and attract the writing of scientific articles based on the results of research of enterprising students. (Meerovitch, Shragin, 2000)

In addition to the scientific-research activities the laboratory can be used to solve educational problems (Simonenko, 2005). The educational laboratory plays an important role in the learning process, by providing consolidation of the theoretical material with practice. By performing laboratory works, students can test theories in practice. By carrying out laboratory tests, the student, in fact, carries out a small scientific research and makes a small discovery for himself. Thus, the laboratory work arouses curiosity, a desire to initiate or carry out an experiment or research. (Osmolovskaya, 2010)

The educational goals of the laboratory are concluded to expand the knowledge of students by the methods and means of solving scientific problems in the field of modeling of machines and materials, using the theory of the inventive problem solving. (Altshuller, 1986)

References
BASIC PSYCHOPHYSIOLOGICAL FEATURES
IN THE EDUCATIONAL PROCESS

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Keywords: Psychophysiology, Computer-Based Information Technologies of Testing

Modern society possesses numerous sources of acquiring information. The need for learning is the main human psychophysiological feature. The developed structure of telecommunications enables mass distribution of knowledge and practical experience as well as creation of information resources.

Better comprehension of cognitive processes laid the groundwork for the organisation of the educational process. In this regard the educational environment represents a complex system which develops in the association with the creative activity of a person. Creative activity is realized by means of activating complex neural processes of the brain that are called psychophysiological acts. Man learns the world around through the perception of various factors and cognitive acts including abstract thinking.

Therefore, assessment of students’ creative abilities becomes a topical question for the educational process at universities. Using the methodological principles stated in the body functional system theory we created a technology of computer testing for students. In the framework of the research conducted we discovered a possibility of identifying various manifestations of the students’ creative abilities which are associated with their developmental peculiarities and the level of learning capacities.

This computer testing takes into account the functions of complex body systems that are capable of adapting to the external factors of the environment (Makarov and Minakov, 2015). Thanks to the natural body abilities to produce a response, perception of textual information test – stream is initialized. This process activates different complexes of the neural system. So when a remark (an answer entered into the testing software) is fixed, a natural neural psychological response occurs. The comprehensive assessment of the students’ abilities is carried out using the fuzzy logic mathematical tools for synthesis of possible responses (remarks) to a series of several hundred questions – tests. The comprehensive assessment falls into several components that stand for thinking, creation of judgments, emotional temperament manifestations, abilities to implement advanced scientific projects, acquire knowledge and use information resources.
This computer technology makes it possible to create individual test packages that take into account the students’ age, their speaking skills in one of the European languages, social and cultural features of their educational environment. Thanks to the existing mathematical tools well adapted for this purpose mass testing events can be organized. With our long-term experience in holding onsite testing events in educational institutions as well as in remote training centers (by means of telecommunications) we managed to identify gifted students. The reliability rate of the comprehensive assessment is about 92.5%. The computer data processing system uses a large number of semantic terms and concepts related to the educational process.

References

ON THE ROLE OF MATHEMATICAL COMPETENCE FOR BUSINESS ENVIRONMENT

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Keywords: optimization, quality of education, competences, individual educational trajectories, educational continuity, business environment

Entry of Latvia into the EU, world economic crisis, sanctions against Russia, debt to the IMF, outflow of working population, inefficient taxation – this is the reality of the Latvian business environment in the conditions of which the Latvian businessmen, managers, bankers, economists, etc. have to operate. All these factors testify the need of essential revision of the aims and tasks of the higher education in general (Koryuhina, Shamshina, 2015), and separate study subjects in particular. This concerns also the mathematical component of a business education having huge value for successful economic activity. Thus, impact of an external and internal business environment on education assumes essential shift in understanding of both students and teachers of the organization of educational process both in a form, and in the contents (Labeev, Shamshina, 2009).

Mathematical competence is the ability of students to apply the system of the acquired mathematical knowledge, skills in research of mathematical models of professional tasks including their abilities to logically think, estimate, select and use information, as well as independently make decisions (Шакирова, Усова, 2012).

Mathematical competence includes the following components:
1. General Scientific Mathematical Competence (GSMC).

Through continuity of approaches to education, achievements of steady quality and effectiveness, the individual and differentiated approaches of tutoring used by the authors, optimization of a course of the higher mathematics for economic specialties in separate types of study has innovative character which is determined by the system of uniform requirements (GSMC and AMC competences) in mathematical disciplines (Labeev, Shamshina, Koryuhina, 2014) and creation of individual educational trajectories when training the modern experts for business activity (Labeev, Shamshina, 2015).

References:


Session 3

Topical Issues of Specialists Professional Training
TELECOMMUNICATION AND ELECTRONIC PROGRAMS
PERMANENT IMPROVEMENT

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Keywords: teaching, learning, quality, study process, course design

The European Union (EU) has as its stated ambition the goal of 40 % of all young people having graduated from higher education by 2020. The ambition to greatly increase the numbers who enter and complete higher education only makes sense if it is accompanied by ensure that the teaching and learning is the best it can possibly be (European Commission Report, 2013).

It is hard to define the common standard for quality in all higher education sectors. Often researchers associate this quality with developing real competence involving the formation of universal thinking skills and solving problems (Andersone, Rutka, 2012). The shelf-life of knowledge can be very short. In many disciplines what is taught and how it is taught have the threat of obsolescence. In a changing world, Europe’s graduates need the education that enables them active, thinking, global citizens.

The purpose of this report is to analyse the factors affecting teaching and learning quality from the point of teaching programs curricular design view. There are factors that are conducive to good teaching and learning (European Commission Report, 2013):

- teaching and learning (not research activity) are fundamental core missions of universities;
- active student involvement is essential in curricular design, development and review, quality assurance procedures;
- it is a key responsibility of institutions to ensure their academic staff are well trained and qualified.

There are barriers to quality teaching and learning. What can be done about them is formulated in several recommendations:

- authorities should ensure the existence of well-funded framework to improve the quality of teaching and learning;
- institution should implement a strategy for the support of teaching and learning;
- higher education institutions should take account of student feedback;
- curricula should be developed and monitored through dialogue and partnerships among teaching staff, students, graduates and labor market actors.
To have an estimation of the possibility of involving students into course design process we perform their knowledge and interests monitoring for long-term technology development. Unfortunately it was found that not less than 40% students (for master programs and more than 60% for bachelor) have no idea about future (beyond 2020). And in the same time comparing of courses subjects of telecommunication and electronic programs with appropriate overviews of future (Dai Kimura et al., 2015) shows practical lack of coincidence.

For course redesign the next recommendations need to be taken into account:

- course is a part of an integrated curriculum which has been jointly designed by all members of staff;
- course organizes teaching in such a way that it will not simply provide students with facts, but confront them with questions that are bigger than the course itself;
- students are not passive recipients of knowledge, but responsible partners in the teaching and learning, they are involved in the permanent improvement of course design.

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MOODLE AS EFFECTIVE ENHANCEMENT IN THE PROCESS OF TEACHING

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Keywords: Moodle, advantages, disadvantages, training, feedback

Education has advanced tremendously since the technological progress started to offer a great variety of tools to make education less teacher-cantered and more open and student-cantered.

One of the most effective systems of enhancing learning process has become Moodle. Its main advantages are free-of-charge basis, availability, mobility, simplicity. The list can be continued as Moodle provides a lot to motivate students to learn, monitor their own achievements and practice newly learned skills.

It may seem that nowadays with the Internet access students are able to find everything online and get equipped with a lot of valuable information. It is definitely true, of course, but there is the other side of the coin. While there is much to offer in the network, there are also many controversies as well as errors, which instead of teaching students, may only confuse them. Moreover, it takes hours to visit all the links and it is unlikely that the information will be retained. This is where the teacher’s role cannot be underestimated. The material downloaded in Moodle is thoroughly selected, processed, presented in the logical way. Students are provided not only with theoretical knowledge but they can also check whether they have understood everything correctly, follow their progress, practice. The system provides immediate feedback for students: after the task has been done and sent for checking, the results are shown, mistakes if any, highlighted, and there is an opportunity to analyse them and if necessary to do the task again.

Unlike other disciplines, teaching English requires a direct and constant contact with the teacher. Having used Moodle for several years, we can admit that it helps overcome the difficulties of having a virtual teacher instead of a real one by organising the material in student-friendly way, using visual aids, vocabulary lists, interactive exercises.

However, along with the advantages of Moodle, there are disadvantages as well:

- The absence of speaking practice;
- Individualism, the lack of social communication and interaction;
- The impossibility of control which might lead to the temptation of cheating;
- Harmfulness.

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Taking these drawbacks into consideration, it still should be pointed out that advantages are overcoming disadvantages. Moodle is successfully used in many educational establishments all over the world, providing support to those who require it, offering collaboration, challenge and thorough training.

The research in this area is based on the current trend analysis in the area of e-learning and the author’s own experience in this field. A successful introduction of Moodle system in TTI made distant learning possible. Analysing advantages and disadvantages of this system enables Moodle to be used not only as e-learning platform. TTI students of the Day department rely on its contents which support them, guide and provide with additional practice.

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Keywords: training requirements, ensuring the practice, expansion of cooperation

The principal activity of Academic and Professional Aviation Center (TSI/APAC), which successfully operates on the basis of Transport and Telecommunication Institute, is the basic training and type training depending on the aircraft types. This activity is strictly regulated by the Commission Regulation 1321/2014 European Aviation Safety Agency, or specifically by the parts of this Regulation – Part-66 and Part 147 (Commission regulation (EU) No 1321/2014). This report reviews the issues that are related not only to the abovementioned domains. Proposals for the expansion of cooperation are considered too.

One of the mandatory requirements of the basic training is to provide students with the practice in aircraft maintenance organisations (subcontractors are available). The training programme involves 500 astronomical hours of practice for students in functioning organisations. One of these subcontractors is the airline company “K.S.Avia”.

The airline company “K.S.Avia” ensures the maintenance of aircrafts not only with gas turbine engines, but also with piston engines. During the cooperation between TSI and “K.S.Avia” several dozen students of the Institute have successfully passed the practice and internship in the company and 5 graduates of TSI continue to work in it.

Besides, the company owns the airport “Jūrmala”, which is located 7 km from the town Tukums. In this connection there is an interest to expand the cooperation of the Institute and the company in the following areas:

1. Logistics problems.
2. Ground handling tariff policy.
3. The impact of airport operations on the environment.
5. Development of the programme for diagnostics of gas turbine engines AI-25TL.
6. Providing training flights during pilot training.
7. Mutual training of airline company’s employees in TSI and personnel of TSI in the airline company.

References
MANAGEMENT OF FORMATION OF CORPORATE CULTURE IN HIGHER SCHOOL

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Keywords: corporate culture, student group, high school

Renewing and renovation of the educational environment in modern conditions occurs so rapidly that it becomes an important “to give soul” to the changes, to form an organization ideology, to employ the corporate culture potential and corporate environment of the student group and the university as a whole. According to J. Simplicio (Simplicio, 2012), the higher school culture, traditions and values have become the vital component the wellbeing of the university capable of providing stability and continuity; this factor contributes substantially to their significance. M. Antic and A. Ceric (Antic & Ceric, 2008) suppose that shared values, strong norms of behaviour and willingness of faculty to obey these norms have become the properties of strong corporate culture of university. In its turn if the corporate culture is weak there are such features as disagreement about main values, absence of norms of behaviour (both written and unwritten) which the university staff is ready to obey. The corporate environment of the university is a common space for all participants of the educational process.

Corporate culture of a higher education institution can be considered at three levels:

- university (faculty) as an independent organization;
- academic staff of faculty departments and staff of other departments as social groups;
- students and student groups.

Every level is different from each other not only by organizational, social and psychological characteristics, but also by the procedure of corporate culture formation.

The author assumes the following task to be the most important: the investigation of the peculiarities of forming the corporate culture of student groups for developing the normative value basis of students’ behaviour. Students become carriers of the university corporate culture, its traditions and values not only during their study, but also after graduation from the university. The property of shared information – positive or negative – depends on the fact whether students share these values. Students always emphasize the importance of positive partnerships with academic staff, interest in their success, objectivity in assessment. Interaction between students and tutors at higher school and
identification with the university results in a synergistic effect; it allows facilitating the learning and organizational motivation via generated positive emotional background of the educational process.

The process of formation of the corporate culture of the student group within the university is more efficient if the following conditions are met:

- the model of management of the corporate culture of the student group is developed and the model peculiarities are determined;
- the procedure of control of the corporate culture of the student group is developed;
- the conditions of ensuring the efficient implementation of the model in the actual teaching practice in higher school are specified;
- the criteria for evaluating the effectiveness of the process of forming the corporate culture are worked out and the diagnostic levels, indicators, techniques, etc. are identified.

The author emphasizes the necessity of elaborating the concept of the corporate culture management of student groups and university, as well as diagnostic methods for further examining and determining the high or low level of the corporate environment development. The noteworthy fact is as follows: the statistically significant relationship between the corporate culture components and the parameters of interpersonal interaction of students: the student group cohesion, sociometric status of students, satisfaction with the role in the group, learning, assessment of the socio-psychological climate of the study group and the university as a whole. It is important that the existing subcultures are not in a conflict and are not in a situation of dissonance with the corporate culture of the university.

References

TEACHING GEOGRAPHY IN THE CONTEXT
OF COMPETENCE-ORIENTED APPROACH FOR FUTURE
PROFESSIONALS

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Keywords: competence-oriented approach to education, transport geography, Higher education institution, learning outcomes

Contemporary requirements in the sphere of professional education envisage the transition from the traditional approach to the competence-oriented one, which shall take into consideration a lot of different factors: globalization process, internalisation of business and economy, social stratification, technical innovations, and also rapidly increasing information flow and constant fluctuations in the labour market, etc. (Mitchell & Nielsen, 2012). Future professionals in the sphere of transport and logistics, management and economy shall be ready to work efficiently in the EU, shall conform to the world standards. They shall also be ready to grow professionally, to be socially and professionally mobile, and to be able to participate in the cross-cultural and professional communication.

Competence-oriented approach can be defined as a strategic guideline for all components of the education system, that has a pragmatic component with an aim in view to build up key competences as a universal way of the study and social activity. (Дубова, 2010). As it can be seen in the description of professional qualities and skills in the sphere of Logistics in Ireland's official graduate jobs and careers website, and also by Careers Centre UK, among such qualities as extensive knowledge of the transportation industry, good people management and coordination skills, excellent negotiation and communication skills there is also Excellent geographical knowledge (Association of Graduate Careers Advisory Services website, 2015; Ireland's official graduate jobs and careers website, 2016). It is obvious that specialists in the sphere of Economics and Logistics are not able to position themselves in the globalised world due to the insufficient consideration of the spatial component in the development of economy and transport. (Butt, 2011) These factors stipulate the topicality and necessity of teaching geography, economic and transport geography, in particular as a constituent part of the program for Economics and Logistics.

Teaching geography in Higher Education Institutions shall be based on the following statements:

- Multidisciplinary approach in teaching;
- Strengthening of the practical part of the course, that envisages students participation in different projects, problem solving, research activities, case studies, and also productive team work activities;
- Active application of the methods of the geographic research for knowledge acquisition
- in the sphere of economics, logistics and transport
- Creation of user friendly, developing environment and study laboratory for studying transport and economic geography.
- Active application of modern information technologies and computer programs;
- Individual competence-oriented approach to teaching students.

In her report the author shares her vision of the methods of teaching geography in Higher education institution, its place among other subjects so that students could acquire key competences in the course of studying subjects in such programs as “Economics”, “Transport and Business Logistics”, and also shares her experience in the methods of studies organization at the lessons of geography.

References

RISK ANALYSIS IN THE FIELD OF EDUCATION

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Keywords: education institutions, risk management, risk of education, students, participants, education services

Economic and political development of the modern world, the information society replacing the industrial society, a high dynamism of life, the lack of stability give rise to new types of risks, which are quite difficult to identify and to evaluate. Such risks include the risks associated with consuming and providing the educational services on the market of educational services; these risks are educational risks. (Чубарова, 2013)

Education Service is a very specific type of product and still contains the certain features of a public good. The peculiarity of educational service lies in the fact that the effect, received by people and society, is difficult to assess. (Шелунцова, 2011)

Educational service is characterized by the lag effect in demand, which is influenced by the changes in the labour market and subsequent changes in public opinion about the prestige and profitability of jobs, long-term benefits, and considerable duration of service provision. All these factors lead to occurrence of a significant risk in the process of consuming this service.

Educational Risk is the state of the subject of the education market, reflecting the degree of feasibility of undesirable development of events due to the objectively existing uncertainty.

To determine the nature of the educational risk it is necessary to identify the main components of risk, its characteristics and general principles of risk classification. (Чубарова, 2013)

All the participants of the educational service market are subjected to the Educational risk; they are not only educational institutions but also consumers, the intermediaries, as well as public institutions and structures involved in the promotion of educational service and products on the market.

It should be noted that the educational risks are speculative risks. All the subjects of the market, investing the capital, are expecting two types of results: profit and losses. The peculiarity of the educational risk lies in the fact that all the market participants assume the minimum level of risks. It is very difficult to assess educational risks. (Лысенко, 2012)

Susceptibility of the market to losses leads to expenses of any subject of educational services market and the national economy as a whole.
The considered theoretical statements can become a starting point for the formation of the concept of risk management within the education system.

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SPECIAL FEATURES OF TRAINING FOR AVIATION PERSONNEL IN THE CONTEXT OF READINESS FOR STRESSFUL SITUATION

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Keywords: training of flight dispatchers, training methodology, training, virtual platform

Such aviation professions as air traffic controllers, flight dispatchers, and flight operations control officers are associated with high level of stress, with decision-making responsibility and fast changing situations, difficult to prognose; they require the integration of special training standards. This aspect is becoming especially evident in more and more increasing flow of different information (Craig, 2013) that is related to trends in the development of airlines operating technologies in today aviation. It is necessary to analyze the received information, to determine the priority, to make decisions quickly and accurately basing on the situation analysis (Patankar & Taylor, 2004).

Standard methods of teaching used in aviation training, could no longer provide students with the appropriate training connected with all aspects of the upcoming performance of their duties; the results of such inappropriate training are difficult and long adaptation of new employees to the real situation and the actual speed of actions in accomplishing the work.

This problem can be solved by integration of "in-game situation scenarios" in the training process; they are the game situational scenarios basing on virtual computing platforms. These technologies allow playing over different “duty” situations, gradually increasing the load and the pressure on the student using a special algorithm. The student and the instructor together can determine the weakest points of the training analyzing the results of the game, and to understand why the certain aspects of the game are critical for a specific action of the cadet. The use of "AVAYA" platform for aviation training can be considered as one of the successful examples of virtual training methods integration.

Author presents the analysis of peculiarities of virtual learning platform, allowing students to focus on learning; it also greatly expands the possibilities of distance learning, simultaneously almost completely ensure the "presence effect". The lack of effect of real practice, requiring work in a group and the presence of the instructor, focusing trainee on performing the certain tasks can be considered as disadvantage of virtual training.

The author also emphasizes that the integration of the methodology and applications of game situational scenarios basing on the virtual environment,
allows avoiding this disadvantage and also opens the possibility to simulate the environment, situation and intensity of cadet’s performance of his duties; it permits to prepare the trainee as much as possible to the real conditions of the work; the possibility to analyze students’ errors and weaknesses increases the efficiency of training, facilitating the training of specialists, capable of perceiving, analysing and making decisions under the conditions of a substantial information flow.

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CROSS-DISCIPLINARY SIMULATION – 21ST CENTURY SKILLS IN ACTION

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Keywords: Cross-disciplinary, business-simulation, skills, new situations, simCEO

The formation of professional competences among students may be provided only by having an independent issue solved by them, within the real projects. These problems are not affecting the Latvian high schools only. There are serious changes in the approach to education in many countries. Universities around the world are implementing programs based on active learning methods.

The purpose of this research is to consider the possibility of business-simulation used in educational programs.

Today there are many interactive learning methods. And in the first place – business-simulation. Starting and managing a business could be very challenging and risky, now students can gain a hands-on experience from the business simulation games. SimCEO is one of such possibility for students.

From mission statements to available natural resources, to PEG ratios, the instructor can customize the degree of complexity that will be covered during the simulation. SimCEO also is flexible enough to provide easy connections to disciplines outside of economics. SimCEO puts students in a situation where they have possibility to create, write, and reason for an authentic purpose – to demonstrate quality in an attempt to persuade others. Student’s work has more meaning than simply being graded by an instructor.

In the game participants create companies, research each others’ companies online, buy/sell shares of each other’s companies which influence the individual share prices, and react to daily news postings (real or fictional) that can affect the market. (Classroomaid, 2012)

All of this takes place in a customized environment (place, time, duration of simulation, complexity) that is set by the teacher who can also integrate content by sharing dynamic news (real of fictional) with users, encouraging users to make adjustments along the way. (Educade, 2016).

Transition from the paradigm of teaching to the paradigm of learning as an answer to the new professional requirements, significantly modifies the studies program, accelerated by scientific and technological research projects.

Cross-disciplinary simulation goals are to bring theory closer to practice, knowledge to skill, abstract formulas and definitions to real life. And to help new entrepreneurs to avoid common mistakes and to be more effective at business development.
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BLEND LEARNING AS A POWERFUL TOOL FOR INCREASING THE EFFICIENCY OF ESP TEACHING

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Keywords: culture of learning, agile methods, adult learners, structured approach

The process of teaching and learning has undergone major changes in recent years. We are getting nearer to a knowledge based society which is a strategic goal for the EU to be achieved by the year 2020. The European society expects to have skilled, competent, highly competitive specialists who will be able to make qualitative decisions for the benefit of the society. Teaching English for Specific Purposes (ESP) makes its own contribution to the construction of the knowledge based society. Incorporation of new technologies into the study process has become a cornerstone in the creation of new study programs.

The article focuses on the elements of Blended Learning system that helps to achieve impressive results within a restricted number of hours for studying English existing today. Blended learning combines elements of both interactive and distant learning. It is especially good for students of evening and extramural departments. Blended learning has become a buzz word nowadays. It is a very wide notion, and every Higher Education Institution tailors the program taking into account its specifics. Generally, blended learning presents a combination of task-based learning for the students’ work online and communication oriented approach in class. (Bonk & Graham, 2006)

The success of any system depends on the motivation of the students, their age and previous experience. Needs analysis is especially important in this case. It will show the teacher how well they are prepared psychologically to work on the program, how to distribute the level of tasks for the work in class and online, how motivated students are for autonomous learning. The author analyzes the tasks offered for students’ autonomous learning.

Blended learning provides more personalized learning. This system puts an accent on student-centered teaching. Performing some creative tasks students may choose the materials according to their level of knowledge and interest, look for more challenging tasks. Positive result of the students autonomous study relies on his/her maturity, consciousness, cognitive ability and responsibility. A great responsibility lies on the developer of the program: the tasks should correspond to the level of the English language knowledge, be interesting, informative and challenging. The tasks are usually accompanied by guidelines which shall be clear and understandable. Speaking about activities in
class, we shall consider skill-based approach with an accent on communication. We shall ensure that the classroom content and online activities compliment each other. The teacher more and more plays the role of a moderator supervising the correctness of the execution, looking forward to an excellent result.

Furthermore, we shall also look at the personal characteristics of the students we work with. They are adults, they are usually highly motivated, they work in mixed ability groups, as a rule, and it has its advantages and disadvantages (Watson, 2008). They bring into the classroom their prior language experience, they are more tuned to developing other skills but oral speech habits. The teacher has to be very flexible to satisfy not only the needs of the students but also the curriculum requirements. All programs are professionally oriented, they are accompanied by the teacher’s recommendations for better performance, samples of test-papers, and questions for a final test.

The author discusses the positive aspects of the existing programs, but also drawbacks and the ways how to eliminate them. Still there is need to work out methods of students’ knowledge acquisition management.

To sum up, blended learning calls for reconsideration and introducing changes into the ESP teaching paradigm in order to satisfy the demands of the day and to meet students need for a more flexible program.

References

USING THE OPPORTUNITIES OF OPEN SYSTEM OF EDUCATION FOR INCREASING THE ATTRACTIVENESS OF THE UNDERGRADUATE COURSES IN ECONOMICS

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Keywords: open system of education, module learning, distance education

Reduced interest in the program on the economy in recent years has affected the majority of universities. This is due to the general state of the economy and the specifics of the courses themselves. According to generally accepted educational standards, Bachelor of Economics academic program aims to prepare generalist economists. Graduates of this program are prepared to carry out such forms of professional activities as: 1) calculations 2) analytical and research functions and 3) organizational management; 4) teaching. These activities are very diverse and require an in-depth study of various economic disciplines. Further training in the magistracy and preparation for scientific or educational activities require an emphasis on general economic disciplines, while preparing students for calculating and economic activity requires more attention to the specific economic subjects. This explains the need for specialization in the third year of training, basing on the interests of the students. However, not all universities are able to provide such specialization. Therefore, to increase the attractiveness of the academic programs in Economics the new opportunities for specialization should be found.

Such opportunities can be provided by an open system of education. The concept of open education has no universal definition. In a narrow sense, an open education system is identified with distance education. Broadly, the open education is primarily characterized by flexibility and includes the parts distance and module learning. In addition to the formation of an open distance learning methods provide additional choice of alternative courses that provide variability, individualization and continuity of education.

The Lisbon strategy of development and implementation of forms of open learning, which allows people to determine themselves the educational path and receive the necessary counseling, is seen as an important component of lifelong learning (Hanf et al., 2015). In practice, this involves the use of the possibility of accumulation and transfer of credits for the development of an integrated mechanism of learning throughout life.

In the EU, an open education system is the most dynamically developing in Germany, where since 2008 implemented a program «Aufstieg durch Bildung», and to the system of open education by 2014 has already connected 25% of
institutions (BMBF, 2014). Analysis of the economic programmes of German universities shows that the creation of a flexible system of modules significantly expands the capabilities and areas of specialization (WHU, Wahlpflichtmodule, 2015).

Using the elements of an open system at the Transport and Telecommunication Institute in the process of teaching the undergraduate students of Academic Courses in Economics allows students to have the individual choice of special selective disciplines after mastering the compulsory basic economic disciplines. The possibilities of such a choice, on the one hand, facilitate consideration of the students’ needs and interests, and on the other hand, increase the demands for self-organization and self-study skills. Thus, the need for independent decision-making increases the responsibility of the student

References

APPLICATION OF KANO METHOD FOR DECISION MAKING AT UNIVERSITIES OFFERING PROFESSIONAL SHORT-TERM COURSES

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Keywords: Kano method, experience, customer satisfaction, factors, respondents

The XXI century is the century of experience. It is not enough to receive a service, what is more important is to receive experience which is of primary importance for consumer (Richards, 2001, Vargo and Lusch, 2004). Experience and creating attractive experience is very important for creating loyalty (Lilja and Wiklund, 2006).

The goal of this research is to determine the possibilities for applying Kano method for university services. To achieve this goal it is necessary to consider the method and decide whether it is applicable for university in general, then specify the restrictions and problems of its implementation.

Any university is not just academic institution; it deals seriously with selling educational product. It means, understanding the levelers which can and must be employed for affecting decision making of potential customer are very important. There are quite many theories measuring the dimensions of motivation, satisfaction, dissatisfaction. Kano theory uses 5 categories for characterizing customer satisfaction with product quality attributes. For example, “Attractive” qualities create satisfaction, but their absence does not mean dissatisfaction, while “must be” factors do not necessarily create satisfaction if they occur, but their absence creates unsatisfied customer (Kano et.al., 1984, Kano, N., 2001, Högström et al., 2010).

The method is applicable for any service. National Research Tomsk State University employs this theory (along with others) for understanding which properties of short-term courses could be interesting for potential customer. The research is taken for different age groups, since they produce refresher and extension courses for various professions and for various levels of qualification.

The paper under consideration retrieves the material of research concerning the group of students of 2-4 years of study; they were proposed a course of Marketing, Visual Marketing and Finance as additional courses giving them additional specialization. The location of school providing these courses was outside their native city. The paper considers only this group of respondents since they are university students and can create a special interest for the Marketing group of any university searching for the ways of extending the list of services provided by the university.
There were 89 respondents, 48 of them were female and 41 – male. The age group was represented by ages from 19 to 21. The data were collected via in-depth interviews, focus groups and continuous classroom questionnaires. The students were interviewed about the factors which were supposed by the researchers as decisive for choosing this option.

The questions included issues from various fields, including professional interests, career items, sights and entertainment facilities in host city, climate, image/prestige of course location, etc.

The obtained results were processed. They make obvious the necessity of additional work over the list of questions proposed to the students for answering in the frameworks of this research. In general, the results are quite “raw” yet; nevertheless, they present a great interest since they have shown that the quite substantial part of factors which are supposed as important ones for researches present rather low interest for respondents.

The importance of this research is evident. It gives opportunity to select the attributes and properties of offered courses which make the product really interesting for potential; consumer.

References

VISUAL AND VERBAL METHODS COMBINATION 
IN PRESENTATIONS OF INFORMATION FOR "FREIGHTS AND CARGO PROCESSING" CLASSES

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Keywords: clip thinking, students, generation of Y, training methods

Depending on a year of birth, since the second half of the 20th century, there are six generations of the population on work methods with information in literature (Кирвас, 2014). Authors focus on teachers of higher education institutions, entrants and students who on the classification stated above treat generation of Y.

Let us provide distinctive characteristics of modern school students and students that are representatives of generation Y. The generation Y ("Y’s") is called still by "network" generation or generation of the Millennium (millennials) as they graduated from school in the new millennium.) This is the first so-called "digital generation" (First Digitals Generation). Today the distance to this generation is from 10 to 30 years.

The common feature of "Y’s" is aiming at visible results and importance of immediate promotion for the work done. They are characterised by the following behaviour:

- impatience and unwillingness "to strain" strongly;
- can't perform monotonous work for a long time;
- got "clip consciousness" and a syndrome of deficiency of attention.
- prefer informal style of communication;
- when studying they seek to leave from a classroom format, prefer online technologies;
- prefer to study on flexible hours, or in the remote mode,
- are inclined to work in team.

For many of them a final assessment for a subject discipline is not the most important. This is the generation that appreciates freedom above everything.

"Y’s" are capable to carry out quick tasks, the rate of life of this generation is quicker than the previous one; often the process of receiving new knowledge is less important than the fact of obtaining the diploma. Besides, it is necessary to motivate "millenials" "with an invention", it is necessary to direct their study not "on the purposes", but through so-called "meanings".

This is the first generation which has no heroes, but they have idols, they are self-confident about themselves, of their value;

The main motivator of this generation is interest, comfort, material award, praise, possibility to work in team, use of modern technical tools.
One of the most important distinctive features of psychology of communications of "Y" is multitasking.

Expenses of time for different types of activity are given in (Крысько, 2012). Authors are interested in a special kind of activity: its main feature is that the generation of Y spends 50-60% of time on it.

Modern students resolutely give preference to a digital format of information, and more seldom they use "classical" papers.

At the end of the 20th century there was a definition of thinking as “digitformat” students using fragmentary clip thinking (Косенко, 2014).

L. Yastrebov, the former teacher of physics and the ex-director of the Moscow center of Internet education, states that at schools there are about 80% of clip-thinking children (Ястребов, 2015).

The clip thinking has the pluses and minuses.

Minuses are as follows:
- the person isn't capable to concentrate on information for a long time, the ability to analyse considerably decreases;
- level of progress falls and the coefficient of assimilation of knowledge decreases;
- pupils become pliable to manipulations and influence;
- the feeling of empathy is weakened.

Pluses are as follows:
- protection of a brain against information overload;
- multitasking development;
- in certain cases reaction acceleration.

The following methods of training are suitable mostly for generation according to references:
- the visual;
- polymodal (audiovisual).

During the first semester of 2015/2016 authors were carrying out the selective analysis of students on concentration of attention on discipline "freights and cargo processing".

Preliminary conclusions show that among students of TSI, while studying, generally it is necessary to deal with representatives of generation Y. Further studying of this phenomenon and clearer understanding of proportions will allow to consider style of work with information when developing teaching materials, especially for distance learning. Employers are also interested in understanding of the work methods organization taking into account features (Hansen, 2014) generation Y thinking style.

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SOME PROBLEMS OF ENGLISH ARTICULATION FOR RUSSIAN NATIVE SPEAKERS

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Keywords: articulation, vowels and consonants, mouth cavity, obstruction, laminal, apical

Different languages use different sounds. This report proposes a review that addresses some typical problems that arise because of the different articulation formation when we deal with Russian native speakers trying to imitate English phonetics: different articulation place, different manner of articulation, the position of the tongue, palatalization, and the aspiration.

The toughest thing is to understand what is so different in sound producing and the manner of articulation. Sound is produced by expelling air from the lungs. To vary different sounds the speech organs create obstructions that shape the air in a particular manner. The point of maximum obstruction is known as the place of articulation, and the way in which the obstruction is formed and released is known as the manner of articulation. In Russian language the place of articulation is created by the tongue that occupies a mouth cavity in a different way than in English. The main difference is in the position of the tongue: Russian vowels and consonants require a tongue to be raised in its middle part. While in English only the tip of the tongue works as the main obstruction instrument (Crowley Terry, 1997).

Consonants t, d, n, l, s and some other are good examples of different positions of the tongue in two languages. In English they are so called apical consonants - speech sound produced by obstructing the air passage with the tip of the tongue. It contrasts with laminal consonants in Russian, which are produced by creating an obstruction with the blade of the tongue (which is just behind the tip) (Кодзасов, Кривнова, 2001). Russian speakers are trying to pronounce n, l, s with the help of much greater area of obstruction and that creates an accent.

Another issue is an aspiration. Using just the tip of your tongue the necessary for English consonants aspiration won’t be a problem for Russian native speakers as it comes out naturally in the right position of the tongue. A very interesting observation is that most Russian speakers spending many years in English speaking country start making English sounds with a slight touch of lisp. It happens because pronouncing English sounds is easier in the front part the mouth cavity – the tip of the tongue moves faster than the whole tongue body, a person starts speaking faster, but still with an accent. It is not yet the
correct way to pronounce English sounds: the mouth should be opened wider than in Russian.

Palatalization also is a very important part of creating correct sounds. It is a way of pronouncing a consonant in which part of the tongue is moved close to the hard palate. It makes a sound milder. In Russian we can see palatalized or non-palatalized consonants. English consonants are somewhere in between Russian hard and mild sounds. The typical example is affricate sounds: complete blockage followed by a gradual release, resulting in a combination of stop + fricative, as in “ch” and “j” (Ladefoged, Maddieson, 1996). Russian ch is always mild, the English “ch” is much harder.

Also vowels pronunciation difference depends mostly on the position of the tongue. If we are talking about similar vowels in both languages we are trying to pronounce them using the means of our native speaking manner. So, trying to pronounce short English “o” as we hear it Russian speakers open jaws wider. But the key thing in the correct “o” pronunciation is to keep your tongue in the lower position so the air flow can meet no obstruction.

These are some typical problems that a Russian native speaker can experience with English sounds. And we can make a conclusion that one of the main differences in Russian and English articulation manner is the position of the tongue: English sounds require a tongue to make no obstruction to the air flow by the middle part of the tongue. But the correct Russian pronunciation is created by the whole body of the tongue. To fully realize the mechanism of sound articulation in a foreign language can help greatly in correct pronunciation and in minimal accent.

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DEVELOPMENT OF THE AVIATION STUDY PROGRAM

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Keywords: program, quality, safety, management system, regulation

The new course „Quality and safety management system of enterprise” – QSMS according to developing and improvements educational programs of Transport and Logistics department - is suggested to include in aviation transport education program. There is actuality of the course determined in time and in accordance to EASA and ICAO regulation requirements (NPA 2013-01).

Managing any aviation organization, large or small, requires the management of many business processes: financing, budgeting, communicating and allocating resources, and so forth. In recent years, managing safety has been added to the list of business processes. Managing safety is now as much a part of running a business as any of the traditional business processes.

A QSMS is a systematic approach to managing safety, including the necessary organizational structure, accountabilities, policies and processes. In order to reinforce the notion of safety management being a managerial process, the new ICAO safety management requirements include provisions for an organization to establish lines of safety accountability throughout the organization, as well as at the senior management level. The requirements impose upon States the responsibility to establish a safety programmer and, as part of such programmer, require that air operators, maintenance organizations, air traffic services providers and certified aerodrome operators implement a safety management system (SMS). Lastly, the requirements impose on States the responsibility to establish an acceptable level of safety for the activities/provision of services under consideration.

Quality and Safety Management Systems (QSMS) Course is to:

- provide participants with knowledge of safety management concepts and ICAO Standards and Recommended Practices (SARPs) on safety management in Annexes 6, 11 and 14, and related guidance material; and
- develop participants’ knowledge to certify and oversee the implementation of key components of an QSMS, in compliance with relevant ICAO (SARPs):
  - Module 1 – SMS course introduction
  - Module 2 – Basic safety concepts
  - Module 3 – Introduction to safety management
  - Module 4 – Hazards
  - Module 5 – Risks
  - Module 6 – SMS regulation
Module 7 – Introduction to SMS
Module 8 – SMS planning
Module 9 – SMS operation
Module 10 – Phased approach to SMS Implementation
Module 11 - Quality system
Module 12 - QSMS

The purpose of studying the course „Quality and safety management system of enterprise” - QSMS - is defined by regulating requirements of EASA documents and contributes to high professional training of future aviation specialists.

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