USE OF RATING SYSTEM FOR THE OBJECTIVE ASSESSMENT
OF KNOWLEDGE OF PUPILS OF THE GYMNASIUM

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Abstract. In modern conditions the comprehensive school has to form complete system of encyclopedic knowledge, abilities, skills, and also experience of independent activity and a personal responsibility which are trained i.e. the key competences defining modern quality of education. Quality of education is defined by several criteria and depends on many factors: motivation of training, modern educational technologies, objectivity of an assessment of knowledge of school students, organization of educational work. One of the approaches promoting improvement of quality of training of school students is the organization of process of training with use of rating system of an assessment. In article relevance of use of a rating for an objective assessment of knowledge of pupils of a gymnasium as aims is proved to give the objective developed assessment of knowledge (readiness) of the school student of all subjects of a subject in the form of its rating which is expedient for using at any certification trained the Author describes a technique of use of rating system which is realized in a general education gymnasium. Five interconnected main functions of rating system are allocated: diagnostic, training, bringing up, developing, organizational, and also the principles of realization of the allocated functions. It is shown that the organization and effective functioning of rating system of an assessment of quality of knowledge of school students allows in practice most to involve all motivational block, to raise a motivational orientation of the personality on success, to create the positive relation to training that will undoubtedly promote education improvement of quality.

Keywords: quality of education, rating system, objective assessment of knowledge of pupils, informative motivation, functions, didactic principles, method of calculation of a rating.

378.12(410)

ТЕНДЕНЦИИ ДИСТАНЦИОННОГО МАГИСТЕРСКОГО ОБРАЗОВАНИЯ
В БРИТАНСКИХ УНИВЕРСИТЕТАХ

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Аннотация. В статье речь идет об особенностях британских университетов, которые предоставляют возможность получить диплом магистра дистанционно, а именно об университетах без границ, о крайне гибких возможностях обучения, об обеспечении качества, о качестве дистанционных программ с точки зрения разных заинтересованных и задействованных сторон, о вступительных требованиях, использовании виртуальной обучающей среды и массовых открытых дистанционных курсов. Принимая во внимание тот факт, что технологии лежат в основе институционных изменений, британские университеты расширяют свои границы географически и функционально предоставляя образовательные услуги за границей Великобритании, а также предоставляя новые возможности доступа до и использования идей и знаний. Кроме того, университеты предлагают широкий спектр многофункциональных курсов и крайне гибкие возможности обучения (касательно места и времени учебы, содержания курса), таким образом предоставляя студентам возможность улучшить карьерные перспективы и продемонстрировать свою компетентность в выбранной ими сфере. Среди остальных современных характеристик британских университетов, которые готовят магистров дистанционно, можно назвать следующие: обязательное использование в полной мере виртуальной обучающей среды; обязательное принятие во внимание требований к качеству и обеспечение качества дистанционных услуг; правильная организация дистанционных курсов с точки зрения разных заинтересованных сторон, а именно с точки зрения составителей дистанционных курсов, тех, кто финансирует их создание, руководителей дистанционных программ, студентов и даже будущих работодателей; достаточно высокие вступительные требования; активное участие в создании массовых открытых дистанционных курсов. Благодаря последнему факту происходит следующее: с одной стороны - самые лучшие курсы от самых лучших университетов становятся доступными каждому бесплатно, с другой стороны – работа по созданию таких курсов способствует межинституционного сотрудничества.

Ключевые слова: тенденции, британские университеты, дистанционное обучение, диплом магистра, без границ, гибкие возможности обучения, качество, вступительные требования, виртуальная обучающая среда, массовые открытые дистанционные курсы.

UK universities are the second most popular destination for international students, taking 11 per cent of the market share. Four British institutions are among the top ten global universities – Cambridge, Oxford, Imperial College London and University College London. The number of people passing through UK universities is rising: between 1997 and 2007 the number of students in higher education grew from 1.8 million to 2.4 million [1].

The economic and social imperatives for continuous higher learning and innovation are growing more urgent just as the primary means to achieve them come under threat. Two vital public policy aspirations are jeopardised: the need to give more people the opportunity to access lifelong learning regardless of background, and the positioning of the UK as a global centre of innovation in the knowledge economy.

Technology is at the heart of this story of institutional change. Responding to the report, The Edgeless University, Diana Warwick, Chief Executive of Universities UK said: "Universities in the UK recognise the importance of new technology and are frequently leading the way in the use of online learning to complement traditional approaches to learning and teaching [2]. Universities are now just one source among many for ideas, knowledge and innovation. That seems to threaten their core position and role, but in this new world of learning and research, there are also great opportunities. The internet, social networks, collaborative online tools that allow people to work together more easily and open access to content are both the cause of change for universities, and a tool with which they can respond.

Thus, one of the current tendencies which characterizes universities nowadays is that the latter become edgeless. This is driven by people finding new ways to access and use ideas and knowledge, by new networks of learning and innovation, and by collaborative research networks that span institutions and businesses. It is an increasingly international

phenomenon. Across the globe, countries are pushing for greater advantages in education and innovation. There is an ever-growing environment of learning, research and knowledge exchange of which universities are one part. In the UK universities become *edgeless geographically* as they start to provide education outside the UK. The University of Nottingham, for example, has a campus in Ningbo, China, and a campus in Malaysia [3]. They are becoming edgeless in research as innovation depends increasingly on collaborations between institutions and among academics. The university is becoming defined by its function – provider and facilitator of learning and research – not its form. Its influence, reach and value extend beyond its UK campus. This is one but not the only characteristic of British universities. Let's discover other modern features of them especially based on the example of Master's programmes by distance.

The question of defining the tendencies of training specialists by distance in British universities is not yet thoroughly investigated. This brings *actual importance* to this question and is the **aim** of our investigation here.

The main statement. Through Online Distance Learning, most British universities offer a wide range of *cutting-edge courses* and *highly flexible study options* to provide the students with the skills to further enhance their career prospects and demonstrate real expertise in their chosen field. Whether they are considering undergraduate study, wish to confirm their credentials through postgraduate taught courses or research opportunities, or would like to demonstrate their ongoing professional competence through Continuous Professional Development, Online Distance Learning courses are designed to help the students every step of the way.

By *highly flexible study options* they mean both *place and time flexibility* and *course flexibility.*

Instead of attending lectures, a student studies online, attends 'virtual' tutorials and submits his assignments over the Internet. One can be in the same country as the university, or overseas. It doesn't matter. Online Distance Learning gives a student the opportunity to study through a university that he would not be able to attend because of his location, or to fit study around work or other commitments. Providing one has use of a computer with Internet access, one can study from home, his workplace, or almost anywhere he chooses. For example studying for Master of Education at the University of Dundee there are both workplace based and non-workplace based routes through the programme. Besides, course and time flexibility is well illustrated by the same programme whereone can get a postgraduate degree depending on the number of modules covered. This fact is better presented in the following table:

Degree	Length of study
	Distance learning (2 optional contact days per module)
MEd	1800 hours of part-time study (6 x 30M modules in total)
PGDiploma	1200 hours of part-time study (4 x 30M modules in total)
PGCertificate	600 hours of part-time study (2 x 30M modules in total)

Most students study part-time completing one module per semester. In certain circumstances students can undertake more than one module per semester [4].

Another example is a postgraduate programme at Edge Hill University in Britain [5]. The programme has three distinct phases, each of which is equivalent to 60 credits.

Phase 1 - Investigating Practice focuses on the evaluation of existing practice. The aim is to engage you in reflective practice, laying the foundations for future progression and providing an introduction to critical reflection and evaluation, enhancing your understanding of practitioner enquiry.

Phase 2 - Developing Practice provides an opportunity to engage in modules with a specialised focus. This might include a focus on teaching and learning, subject specialist knowledge development, coaching and mentoring, educational leadership, issues within a particular sector (such as early years, primary, post-compulsory or lifelong learning) and special educational needs.

Phase 3 - Embedding Improved Practice will enable you to develop a thorough knowledge and critical understanding of enquiry-based research. It will involve researching, planning and completing an enquiry that impacts on learners, directly or indirectly, in their educational setting and area of work.

A wide *choice of pathways* are available on the MA Education programme:
• MA Education
• MA Education (Art)
• MA Education (English)
• MA Education English Teaching to Speakers of Other Languages (ETSOL)
• MA Education (Foreign Languages)
• MA Education (Geography)
• MA Education (History)
• MA Education (Information & Communication Technology)
• MA Education (Lifelong Learning)
• MA Education (Mentoring and Coaching)
• MA Education (Teaching and Learning). The total number is 39 awards only for Master's degree. For a named award at least two thirds of credits must be for modules which are directly related to the specialist focus [5].

A properly adopted *virtual learning environment* is a must for every university which provides programmes of study by distance. A Virtual Learning Environment (VLE) used by top-ranking universities globally, Blackboard, for example, provides online access to course materials and learning resources. Using the Blackboard software, one can complete and submit coursework, check his progress, communicate with his lecturer and participate in lively, active debate with other students from around the world regarding the central issues of your learning. The benefits of Blackboard include:
- Access to important reference material, handouts, reading lists and web links
- Talking to other students and tutors through online discussion boards and forums
- Attending 'virtual' presentations and tutorials
- Discussing ideas, exchanging information and joining in lively debates
- Completing and submitting your assignments with the support of online marking and feedback
- Keeping up-to-date with course deadlines and announcements

Quality assurance is another important standpoint for British universities. Bernadette Robinson, for example, suggests that At a practical level 'doing' quality assurance involves a continuous cycle of:
• setting standards for a key activity;
• carrying out the activity;
• judging achievements against the standards (measuring the gap between policy or plan and practice or performance);
• planning for improvement; and
• taking action to implement desired changes [6, c. 190].

Besides, in education and training through open and distance methods, we often use the term quality in relation to course materials and services to indicate their 'fitness for the purpose intended'. This definition raises the question of whose purpose we are talking about. With any course, there are a number of different interested parties, or stakeholders: there are the course designers, the programme managers, the

organization providing the course, the funders or sponsors of the course, the students themselves and, increasingly, their employers. The major concerns of each of these stakeholders may well differ from each other. They will cover academic, pedagogic and vocational issues as well as the learning experience as a whole. For example:

• Course designers have worked hard to produce a course package which might use a number of different media, and which will have a variety of teaching strategies and devices within it. They will probably be principally concerned about the teaching effectiveness of the course.

• The programme managers and the organization providing the course will be concerned that the course at least covers its costs, and that the funding agency feels that it has received value for money.

• The funders' criteria are perhaps the least predictable in that the range of possible funders is so wide. It may be that the funding body is an employer, a government agency, a charitable trust or the students themselves who are paying the full cost of the course. Each of these groups will have different criteria which may or may not include such aspects as the type of person recruited as a student (e.g. courses for the unemployed), the numbers recruited, who successfully completes the course and the knowledge, skills and personal qualities they expect those who complete the course to have acquired in the course of their studies.

• Students' criteria for judging a course are likely to focus on the process of learning as well as the outcomes from it - whether or not they grew in confidence as learners, the extent to which they found the experience pleasurable, the balance between the costs of study (financial and personal) and the perceived benefits, the usefulness of the qualifications or the skills and knowledge gained and the quality of the learning experience. Thus, the milestones for learners choosing the course are the following: learner-needs assessment; registration process and timing; scheduling of mailings; record-keeping; briefing and monitoring of staff involved and most of all course choice information, such as prospectuses in database/ brochures, people (advisers, tutors, training officers), career advice.

• Employers will be more concerned with the output from the course - the skills, knowledge and the personal qualities students acquire [7, с. 195-196].

Entry requirements is another important issue about British universities. For example, as English is used in learning, teaching and assessment, you will not gain the full benefit from your Online Distance Learning course unless you have the appropriate standard of English. For this reason, in most universities entry criteria for international students they require an English language qualification, e.g. IELTS average of 6.0, TOEFL score of 550 (213 computer-based). Applicants will normally be graduates or be able to provide evidence that they can work at postgraduate level. They should ideally be able to undertake work related to a programme specialism in their workplace setting or other appropriate agency.

For the last two or three years British universities have joined the community of *MOOC* courses. MOOC standing for Massive Open Online Course – is a term likely to enter into our common vernacular. New technology enables the possibility to teach over 100.000 students at the same time in the same course. Teaching such many students in a traditional campus situation will take more than 250 years. New technologies enables us to give (the best quality) education to a virtually unlimited number of people. Nowadays the best courses from the best institutions are made available for everyone in the world for free. Institutions are working together to make this possible, for example by Cousera, Udacity, MITx and EdX.

What is a MOOC? A MOOC is a course or unit accessible, usually with no prerequisites, to anyone who wishes to enroll, usually for free, and with self-assessment or peer assessment along the way. Many now are being offered by household name universities who may not give you credit towards a degree, but will often award certificates of participation, or even a grade.

Most MOOCs are now delivered by acknowledged experts and outstanding teachers. MOOCs are very new, and no-one yet knows what they will mean or what role they will play in the future of education. But many already believe that Pandora's box has been opened. Whatever the future holds in store, you can benefit from these online courses already today.

Conclusions and perspectives of further research. British universities have long been the target for applicants, being one of the most prestigious not only with home students but internationally as well. The more so when most universities have implemented distance learning. We strongly believe that it is due to those peculiarities described above, which are well worth borrowing for our universities. Thus the advantages of British universities are as follows: edgeless character; providing *cutting-edge courses* with a wide *choice of pathways* and *highly flexible in time, place and course study options*; obligatory usage to full extend of the proper *virtual learning environment;* the due respect to *quality* and *quality assurance;* the right organization of distance courses in respect to every *stakeholder* it refers, that is to course designers, the funders, the programme managers, students and even future employers; rather high *entry requirements*; being a member of the community of *MOOCs*. Further research makes it possible to investigate how all these characteristics are realized within a particular distance programme.

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TENDENCIES OF GAINING MASTER'S DEGREE BY DISTANCE IN BRITISH UNIVERSITIES

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Abstract: The article deals with the peculiarities of British universities providing master's degree by distance. Namely, it analyses such features as their edgeless character, highly flexible study options, quality assurance, quality of courses in regard to every stakeholder, entry requirements, usage of VLE and MOOCs. Due to the fact that technology is at the heart of institutional change, in the UK universities become edgeless geographically and functionally as they start to provide education outside the UK and providing new ways to access and use ideas and knowledge. Besides, universities offer a wide range of cutting-edge courses and highly flexible study options in terms of time and place of studying and course content to provide the students with the skills to further enhance their career prospects and demonstrate real expertise in their chosen field. Other modern characteristics of British universities providing master's degree by distance are as follows: obligatory usage of the proper virtual learning environment to full extend; the due respect to quality and quality assurance; the right organization of distance courses in respect to every stakeholder it refers, that is to course designers, the funders, the programme managers, students and even future employers; rather high entry requirements; being a member of the community of MOOCs. The latter provides availability of the best courses from the best universities for everyone in the world for free on the one hand, and on the other hand it encourages cooperation between institutions.

Keywords: tendencies, British universities, distance learning, Master's degree, edgeless, flexible study options, quality, entry requirements, VLE, MOOC.

УДК 372.854

ЭКОЛОГИЗАЦИЯ ОБРАЗОВАНИЯ В ТЕХНИЧЕСКОМ ВУЗЕ

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Аннотация. В статье рассматриваются вопросы формирования экологической культуры студентов технического вуза в процессе изучения дисциплины, рассмотрены основные источники загрязнения окружающей среды и связанные с ними риски вызванные работой автомобильного и сельскохозяйственного транспорта, в том числе, железнодорожного транспорта и предприятий обслуживающих железнодорожное полотно и технику, подчеркивается химическая природа кислотных дождей нарушающих баланс жизни, влияние на конструкционные материалы и на памятники культуры, которые находятся под открытым небом, обозначена экологическая функция и задача вытекающая из неё, экологическое образование и воспитание в учебном процессе и внеаудиторной работе, предлагается усиление работы по борьбе с загрязнением окружающей среды и, ввести в курс химии конкретные инженерные проблемы, уделяется внимание наиболее полному проявлению к взаимопроникновению и взаимозависимости живого и неживого, загрязнение территории химическими веществами и смогом, а также тяжелыми металлами и их влияние на здоровье человека, для реализации системной деятельности введены нестандартные ситуации профессионального характера, приводятся конкретные предложения ведущих специалистов производственного звена, которые могут способствовать улучшению экологической обстановки, приведены примеры исследовательской работы студентов в локальных очагах загрязнения выбросами автотранспорта, влияние выбросов на изменение зеленого пигмента в листьях деревьев, а также влияние выбросов на появление зеленого конуса листа на конце почки, обозначены проблемы экологического характера в целом и в особенности на транспорте (автомобильный, железнодорожный, сельскохозяйственный), методы их решения, путем перестройки преподавания курса химии на методологической основе и способы воспитания экологического сознания через специальные задания экологической направленности (студенческие конференции, диспуты, семинары).

Ключевые слова: выбросы, задачи экологической направленности, исследования, моделирование, системно-деятельностное, фазы, фенологическая оценка, химическое загрязнение, хролофилл, экологическое воспитание, экологический кризис, экология транспорта.

Развитие производительных сил и научно-технический прогресс резко обострили экологическую проблему и существенно повлияли на условия жизни людей. Сегодня уже невозможно решать социально-экономические задачи без учета состояния природной среды.

Поскольку технические решения принимают специалисты с высшим образованием, то возрастает ответственность вузов, выпускающих специалистов технического профиля и, как следствие, возникает проблема формирования экологической культуры будущих специалистов. Вуз должен подготовить людей, способных предвидеть широкий круг экологических последствий проектных, технических и производственно-экономических решений. Важную роль в экологическом воспитании будущих инженеров должно сыграть изучение химии.

Таким образом, для науки и образования, кроме известных задач, необходима и экологическая функция, направленная на сохранение природы и обеспечение гармонических условий для жизни человека. Важной задачей, вытекающей из этой функции, является формирование экологического сознания. Экологическое сознание - это мировоззренческие установки убеждения о том, что современный экологический кризис поставит под угрозу существование самой природы, в первую очередь существование биосферы. Поэтому необходимо не только дать сведения студентам по экологии, но и сформировать новую культуру отношений к природе [1, с. 407].

В этой связи предлагается экологическое образование и воспитание начинать с первого курса, путем внесения экологических знаний в содержание общественно-политических, общеобразовательных, общенаучных, общеинженерных и специальных дисциплин. В экологическом воспитании студенческой молодежи помимо учебного процесса, необходимо использовать также внеучебную и внеаудиторную работу. Среди этих форм можно выделить следующие: научно-исследовательская работа по экологической тематике, диспуты по экологическим вопросам, беседы за «круглым столом», прове-