DEVELOPMENT OF WEB-BASED QUALITY ASSURANCE LEARNING MANAGEMENT SYSTEM

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Annotation

Problems of the developing and using Web-based learning management system for improving specialists' skills is considered in this paper. Particularly, it's focused mostly on the e-learning systems for the distance education. Author uses his experience in development of such kind of systems in Uzbekistan.

Key words: web-based learning management system, distance learning, quality assurance.

Introduction

We consider problems concerned with the process of developing the Web-based learning management system for improving specialists' skills. We will be focused mostly on the e-learning systems for the distance education.

Distance Education is characterized by more applying system approach in comparing with the traditional education. The system approach to Distance Education means that educational process is considered as a system of elements correlating with each other. In this case the problems of Quality Assurance become a very important. System acts toward definite goal which is a Quality Assurance in distance learning.

Here the author uses experience of Asian Development Bank Project of Developing Senior Secondary and Vocational Education in Uzbekistan. In frame of project above quality assurance system including Web-based learning management system for improving specialists' skills for developing and delivering the distance education courses for teacher training has been developed and tested. Several short courses on professional subjects have been developed. Delivery based on these courses has been provided in lyceums and colleges during 2004-2007 years. Later on the principles put on the development of that management system have been used to introducing the distance learning for improving the skills of pharmaceutical specialists in Uzbekistan.

Distance Education Quality Assurance System

Teacher training system in all post-soviet countries has the same problems concerning with existing number of different institutions responded for such training. These institutes have different programs and prepare specialists in different sphere. They have different experience in using distance learning methods. So, besides of others, the problems of quality assurance and developing the according web-based learning management system for the distance education had to include standardization of programs and development of standardized learning courses. These problems would be solved in frame of Distance Education Quality Assurance System (DEQAS) for teacher training which has been developing as a result of project above. The basic elements of this system and their influence on quality assurance are considered in this section1.

DEQAS is based on following elements: (1) the system of Distance Education Resource Centres; (2) strategic planning; (3) program planning; (4) course developing; (5) tutor training; (6) delivery; (7) course assessment; and (8) course remaking.

In frame of ADB project above there was established a system of 14 Regional Distance Education Resource Centres (RDERC) and Distance Education Centre (DEC) at the Head Institute of Training and Retraining of Personal of Senior Secondary and Vocational Education system. DEC was responsible for coordinating all activities on personal training in according educational sector. Further development of this system would be the basic for implementation of DEQAS, and DEC would be a kernel of DEQAS. The quality assurance in regional delivery will be depended on success-

ful activity and interaction of these centres [1].

Strategic planning includes assembling and studying information needed for a system planning: user needs analysis; cost-benefit analysis; study of regional infrastructure for defining proper distance education technology; SWOT analysis (strengths, weaknesses, opportunities and threats); and an analysis of program evaluation requirements for the intended DEQAS. Appropriate regional information will be presented by RDERC. Strategic planning is the platform for further development of DEQAS. A formalized Strategic Plan should be validated by educational senior staff.

Program planning consists of developing course plans (Blueprints) for all courses of intended distance education program. Standardization for each course will guarantee quality of learning materials. Each Blueprint will consist of (1) course description; (2) course objectives; (3) course outlines listing all major topics taught in each unit; (4) description of all course materials and equipment required by learners; (5) description and mark allocations of all course assessments and examinations; (6) schedule for completing course activities; (7) diagnostic form indicating time allocated for various learning activities; (8) budget for course development (fixed) costs and delivery (variable) costs; and (9) course evaluation, revision and maintenance requirements. Computer-based Blueprint templates will be developed for more course standardizing. Program planning data will be transferred directly and electronically to course materials (course guides, study units) during course development phases.

During course developing phase course materials based on existing conventional syllabus will be prepared, if possible. Otherwise, original learning materials will be developed. The Program Plan is template-based and standardized, so will provide course writers with quality-assured outlines for course development. Courses will be developed by specialists from higher education institutions or practices from vocational colleges. Special training for course writers will be organized. Course writers will be familiarized with the peculiarities of distance education materials and will teach on using Blueprint templates.

Tutor training is a very important element of DEQAS. Effective learner's support is one of the key factors for quality assurance in distance education. Special tutor manual should be developed for each course. This manual consists of description of tutor's responsibilities, main parts of Course Guide with the course objectives and structure, curriculum, course assessment system, including special guides on tutor mark assessments, assessment criteria, answer keys for testing, set of all needed templates. Tutors may be trained by distance too.

Course delivery may be provided by training centers of higher education Institutions using RDERCs. DEC, especially in teacher training would be the coordinating center. Such system of DECs acts successfully in many European countries. As experience shows (for example, Dutch Open University), the Head DEC usually is responsible for developing general distance education strategy, program planning and preparing learning materials. That center also coordinates academic learner's support element of the system. RDERCs usually provide administrative support of learners. They can provide tutor support and take part in developing courses too (as in Uzbekistan, because regional DECs mainly act in frame of universities and have sufficiently academic potential).

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1) Distance education experts Shannon Timmers (Canada) and Janet Jenkins (UK), and author of this paper took part in developing and implementing the strategy of QADES in Uzbekistan.

As an element of quality assurance system course assessment reflects effectiveness of distance education system, and allows getting objective data on acting system. Such data is necessary for further improving courses. Usually, course assessment is realized by learner's questionnaires, discussions with the employers or senior education staff (in case of teacher training). Results of final examinations allow getting impartial course evaluation.

All system elements work in close interaction and strict sequence to attach unit goal. Educational process based on standardized program courses is provided systematically and improved continually.

Conclusion

Web-based learning management system can be effectively used in the process of improving skills of specialists. Moreover, such systems have successfully applied both in the organization of the learning process, and for further monitoring trainees. Such forms of interactive feedback contribute to building a more adequate training programs and courses based on real needs and assessments of the quality of educational services.

However, the introduction of the system at the improving

skills centres requires a certain infrastructure. Experience of leading universities shows that, first and foremost, it is necessary to build a system to assess the knowledge and skills of trained specialists based on the standards of competence about their professions and positions. Such training program designed to meet these requirements for competence.

Competence, in turn, is divided into several degrees. As different positions require different degrees of professional competence, training courses and computer programs should be aimed at achieving an appropriate degree. Web-based system of course management helps the trainees to determine whether they have reached the required level of competence, and to obtain adequate self-esteem.

References

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