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Quality Issues of Online Distance Learning

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Abstract

Despite a rapid development of online tertiary education, it is clear that educators and students encounter certain barriers that affect the overall quality of distance learning. This paper aims to present the results of the survey conducted at the Ural State University of Economics and Ural Federal University (Yekaterinburg, Russia) on student-focused quality indicators: interaction and collaboration; instructional design and delivery; student assessment; student support services. Over 800 degree students (n = 830) involved in distance learning programs responded to a 26-question on-line survey to identify the areas that the university administrators, staff, and technicians can improve upon to ensure high quality of online distance education delivery. We found that although degree students overall positively evaluate their distance learning experiences; they face some learning challenges especially in regard to effective teaching practices and communication patterns. The findings support the prediction that the faculty plays crucial role in knowledge construction and can be of use for all tertiary sector stakeholders in exploring solutions to maximize the ICT potential in distance tertiary education.

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Keywords: tertiary education; distance learning; online learning barriers; quality indicators; student survey; faculty role

1. Introduction

Distance learning (DL) has become a pervasive and growing phenomenon giving a tremendous boost to the use of information and communication technologies (ICT) in tertiary institutions. Currently, online is the fastest growing sector of higher education (Means, Toyama, Murphy, Bakia, & Jones, 2010), gaining popularity both on and off campus. However, the employment of distance education by universities and colleges highlighted issues relevant to

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the quality and effectiveness of online distance higher education compared to conventional educational patterns. These issues are brought about by a number of reasons, the major one being ever-increasing demand for knowledgeable, 'high-caliber human resources' that can effectively participate in the global marketplace.

Educators are not in agreement how to evaluate quality and effectiveness of distance learning. Supporters of online distance learning (Allen et al., 2004; Shachar & Neumann, 2003) argue that learning at a distance can be as effective or even more effective than a face-to-face pattern. It is reported that the delivery media for instructional content is unlikely to dramatically impact the learning outcomes, whereas content, teaching methods, communication, and learner support are extremely important for student satisfaction. Opponents, however, express concerns that students in online environments tend to feel more confused, isolated, and frustrated, and as a result their learning effectiveness and satisfaction can be reduced (Zaborova & Markova, 2016; Ni, 2013). Such differences in approaches prove that learning effectiveness is a complex concept with multiple dimensions and should be assessed with multiple measures. That is why certain quality indicators must be established to ensure high quality standards in distance tertiary education.

Researchers evaluate distance learning quality against student learning outcomes (Ni, 2013; Costreie, 2011); overall student satisfaction with distance learning experience (Bekele, 2010; Bolliger & Wasilik, 2009), and students' attitudes to distance learning (Salyers et al., 2014). Sloan Consortium (2002) proposes a framework of five pillars of quality, where student satisfaction plays the key role. In this paper, we aim to prove our assumption that student satisfaction is impacted by the educators' ability to effectively utilize active learning techniques, integrate high-level interaction and collaboration into the instructional design, and provide high quality and timely learner support and resources. These factors, affecting students' perception of their distance learning experience, need to be understood in order to provide students with a more comprehensive educational experience and greater benefit from this pattern of education. We address these issues within the literature review, special attention being given to the key challenges for maintaining high quality distance learning standards, which include lack of effective teaching practices and communication patterns.

2. Literature Review

Faculty commitment to instructional design and delivery is pivotal for creating effective virtual environments. The literature indicates that faculty needs to recognize that e-teaching requires design expertise and delivery skills (Salyers et al., 2014). Courses must be designed so that students could benefit from the interactive potential of online learning (Thorpe, 2002), so instructors require extensive training on how to utilize new technologies and adapt teaching methods to distance learning environment (Valentine, 2002). Faculty positive attitude to ICT also does affect the students' perceptions of their distance learning experiences (Valentine, 2002). Overall, faculty should understand that online instruction is generating new forms of interaction, learner support and assessment.

Modern ICT provide enormous opportunities for effective communication. It is asserted that in the virtual learning environment communication and interaction can be more student-centered, less intimidating, and encourage greater participation than classroom interactions (Allen et al., 2004; Ni, 2013). A lot of evidence has been also provided that the quality and quantity of communication give a raise to the overall student learning perception and satisfaction (Sloan, 2002). However, it is still a controversial issue, whether the introduction of ICT is likely to influence the learning effectiveness (Allen et al., 2004). Therefore, certain efforts are to be undertaken to utilize the ICT communication potential in virtual learning environment. Guri-Rosenblit (2009) cautions that not every interaction can affect enhanced learning. This can be achieved given the interaction is meaningful, which holds true both for on campus and off campus students. Gibbs and Simpson (2004) advocate for regular, comprehensive, and detailed feedback as the main interactive component of teaching. They conclude that only immediate and specific feedback provided by instructors enables students to gain control over their learning and monitor their own performance. Distance students, due to their backgrounds, may also feel more pressure to collaborate and be part of the team (Valentine, 2002). These collaboration and interaction issues must be thoroughly considered in the instructional design and student support services.

Student support and resources are central to the students' success and satisfaction in virtual learning environments. Tait (2000) defines student support as "a range of services which complement the course materials or learning resources" (p.288) and stresses that they must be provided for all students rather than those with specific needs. The

author concludes that student support performs three essential and interdependent functions: cognitive, affective, and systemic. These contribute to developing learning through tutoring and assessment, enhancing student commitment and self-esteem as well as establishing user-friendly information management systems. Thorpe (2002) asserts that given the extent of collaboration and interaction required for effective online learning, it is time to integrate student support into instructional design rather than just delivery. This is sure to reduce students' anxiety about ICT and facilitate their online learning, which leads to more enjoyable and successful learning experiences.

Continuous assessment stimulates a critical grasp of knowledge and deep processing of resources and practice in virtual learning environments (Thorpe, 2002). To meet students' learning expectations, instructors are supposed to utilize different forms of assessment, consistent with individual or group based distance learning approaches. However, not every form of assessment is equally productive and motivating. Gibbs and Simpson (2004) found that students often perceive assessment as the indication of their personal ability. Therefore, low grades often damage a student's ability to be effective. Yet, the authors argue that assessment must be more about learning support than measuring learning outcomes. It is suggested that under certain conditions assessment can support and promote effective student learning. To achieve this objective, assessment must be frequent and focused, involve appropriate learning activities, and seriously engage students with demanding practice. In this case, assessment is likely not only to encourage students to allocate more study hours and efforts to assessed tasks, but also orient them to in-depth rather that a surface approach to learning. These findings are bound to work well for full-time students, but there is still not enough research data on effective assessment strategies in virtual environment. What is still clear is that learning quality seems to be hardly attainable, unless effective interaction practices between students and instructors are put in place.

3. Research Results

3.1. Data Gathering

The research was conducted twice, half a year apart, at the end of 2015 and again in early 2016. The number of participants who took part in the research was respectively 703(N=703) and 830(N=830) students. The general totality was students of the two universities in Yekaterinburg: the Ural State University of Economics (USUE) and Ural Federal University (UrFU). These universities are the largest higher educational institutions of Sverdlovskaya oblast with the total number of students exceeding 50 thousand. The annual enrolment in the universities is about 15 thousand young people. Senior students (bachelors and masters) of both universities with the distance mode of delivery were offered to complete the authors' online questionnaire (a solid survey of the target audience limited volume). The questionnaire sample was available through a live online link distributed by the management of University Distance Education Centers.

3.2. Instrument

The online questionnaire had a total of 26 questions including four questions with a 5-point Likert scale, ranging from 1 = *strongly disagree* to 5 = *strongly agree.* In some questions the 'n*ot applicable'* option was also included. Areas covered in the questionnaire included the following: general use of technology and resources, distance learning effectiveness, motivation challenges, student/instructor communication and interaction, knowledge evaluation and self-assessment, and students' satisfaction with DL.

3.3. Demographic Profiles

The study included student-participants aged from 19 to 54 years old. The geographic area covers 27 big and small towns of the Ural region, of which four big cities are populated by over a million people. The vast majority of respondents were female (66.6%), which may be explained by the gender composition of the universities and in some way by cultural traditions of Russia. That is why there are professional programs at the universities, which traditionally are more popular with female students (e.g. Accounting, Food Technology, and Economics in Healthcare sphere).

Male participants are mainly students majoring in Finance, Law, Labor Economics, and Economic Security. Most of the students pursue a degree program fully through distance learning – 65.6%, some of them are involved in obtaining a degree by correspondence – 21.8%, the rest of the students belong to such form as 'accelerated education'. It is also worth noting that the majority of the students combine their work and studies (88.9%), 85% of them have full-time jobs. Therefore, distance learning for this category of students is often the only possibility to earn a degree.

3.4. Findings

The participants reported a wide range of reasons that motivated them to choose the online mode of professional study. The data in Table 1 show that the top four reasons are: the possibility to combine their work and study (72%), possibility to study at the place of residence (58.6%), reasonable tuition fees (24.7%), flexibility in learning time (26.1%). Among other reasons the respondents pointed out flexibility in varying the workload (16.5%), friends' recommendation (7.8%). As students were offered to tick off more than one reasons (but not more than 3), we can say that the decision about taking a distance learning course was made on the basis of two or even three incentives and was mainly affected by students' social roles and territorial remoteness of the University.

Table 1. Incentives to take an online course.

Incentive	% of the total
Possibility to combine their work and study	72.0
Possibility to get education at the place of residence	58.6
Flexibility in learning time	26.1
Reasonable tuition fee	24.7
Flexibility in workload	16.5
Friends' recommendation	7.8
Prefer only online learning	4.9
Other reasons	3.4

Students' responses to the question about the quality of online learning organization at the universities demonstrated that in many ways their expectations, which motivated them to take an online degree course, were met. Respondents highly evaluate the same points that they mentioned in incentives – they really have flexibility in training time. On the 5-point scale, 37% of the students ticked off "*strongly agree*" and 26.8% – "*agree*". The majority of them met the expectations both in workload flexibility ("*strongly agree*" and "*agree*" are 34.6% and 27.1% respectively) and in possibility to study at the place of residence (40.8% and 20.4%). These results show that an increase in popularity of distance learning among people of different age groups and those living in rural areas is quite justified.

Though it is well known that technology only does not teach students; effective teachers do, technical support plays a crucial role in distance learning. Technicians can indirectly influence the learning environment by reducing the learners' anxiety and have a huge impact on the quality of the learning process. The survey demonstrated that the work of the support staff was highly evaluated by students. Around 80% rated it as excellent and good (48.1% and 29 % respectively). The participants were found to hold positive perceptions of the value of ICT resources for distance learning and were quite confident about their own abilities to use ICT for learning online. They also positively assessed the level of technical support provided by the university through the students' call-centers. Students characterized the work of the call centers as "good" – 21.7% and "excellent" – 31.7%. However, interpreting these data we can conclude that more than 40% of respondents are either not satisfied with the quality of technical support or have difficulty evaluating it. This leaves the university authority room for improvement of the students' support services.

A wide range of resources and media available to students in online learning include the university LMS (74.1%), e-libraries (60.4%), e-database (44.1%), online textbooks (70.8%), videoconferencing facilities (70.8%), e-mail – (41.5%), printed materials – (33.1%). Such learning environment presupposes that students acquire special skills and can utilize these resources effectively. Self-assessment of our respondents demonstrated that students are quite confident in using them, which confirms good level of their skills.

Apart from the question about availability of different resources, students were also asked how often these resources are used in online teaching. The responses highlighted the fact that instructors most frequently utilize the resources intended to control the students' knowledge and those that are applied in traditional education mode. Online lecture is used "very often" (38.7%) and "often" (42.2%); online tests - "often" (40.5%) and "very often" (29.3%). The same figures prevail in conducting online exams: "very often" (38.7%) and "often" (40.8%) and online course paper presentation "often" (29.9%) and "very often" (17.4%). Though these forms provide a good opportunity to assess students' knowledge at different stages of the learning process, they are certainly not sufficient for measuring overall learning outcomes. All these forms, effectively employed in traditional learning, have successfully migrated to distance learning. Yet, such non-standard methods of distance teaching as, for example, role-plays or interactive training, are utilized "very seldom", "seldom" or are not practiced at all by the majority of instructors (92% and 84% respectively). The only non-conventional approach that has become quite popular in DL is videoconferencing.

Quality of students' knowledge will depend on the improved instruction and new methods of teaching rather than on replication of traditional methods. Therefore, the faculty qualifications is an essential component in creating high quality distance learning programs, adapting traditional teaching methods to distance learning mode and thus building up effective virtual environments. Students express positive views about instructors' professional skills and competences. They assessed technical skills (or ability to deliver an online course) as "excellent" and "good" (48.3% and 29.2%), pedagogical – "excellent" and "good" marks are 70.6% and 20.6% respectively. Similar figures we see in assessing instructors' methodological skills (62.5% – "excellent" and 23.4% – "good") and their communicative interaction (51.3% – "excellent" and 27.1% – "good"). The majority of students highly appreciate the feedback from the staff: opportunity to communicate interactively with instructors and receive necessary guidance and counseling were estimated at maximum – over 70% evaluated it as "excellent" and "good". However, at this point we face the first contentious issue in the research. Being so positive about distance learning opportunities and staff competences in general, students do not consider that this mode of education contributes to maintaining an emotional contact with instructors and developing an individual approach to learning – in other words studying in the frames of "one to one" model. A little more than 40% of students show agreement that they have emotional contact while 37.4% say "no" and 22.2% – "not applicable"; similar responses we see regarding individualization – 44.5% say "yes", the rest answered "no" (29.6%) or "not applicable" (25.9%). Moreover, only 30.5 % of the students directly stated that distance learning promotes interactive teacher-students' communication while the rest do not agree (45.2%) or are not sure about it (24.3%). These findings indicate that course designers and instructors fail to utilize the enormous interactive potential of ICT. As a result, this contributes to students' feeling of isolation, which presents a crucial barrier to their learning.

It is believed that e-learning is designed for purposeful and disciplined people, as there is no direct contact with the instructor, which significantly increases the demand to work independently. The participants admit that DL promotes developing professional skills and competences including the skill of self-study (73.3%), ability to plan and organize (61.2%), time-management skills (56%), ability to solve problems (51.7%), work in the team (42.4%), take responsibility (42%), work under pressure (28.7%), be creative and initiative (24.9%). Understanding that distance learning gives everybody an opportunity to develop these social qualities, which are undoubtedly necessary for modern professionals, is half of success on the students' way to become good specialists. To what extent do modern students really acquire these qualities through online learning?

Students' responses indicated another contradiction in the students' views on DL. Among online learning challenges students again point out "high level of self-learning" (53.8%), "need for self-organization" (31.1%). Thus, understanding of DL promises is not necessarily the key to success. Participants of the survey also identify such difficulties as "lack of emotional communication with the teacher" (31.1%), "lack of teacher control" (20.5%), and 13.1% of participants directly point out to the 'sense of isolation', which gives additional argument in favor of students' need for effective interaction practices with instructors. Students' need for instructors' attention may be even more important in a virtual environment than in a traditional classroom. In a situation where eye contact and proximity are limited, students tend to be less disciplined without being supported by instructors' eye contact and body language. The result is reduced quality of education. These issues are mainly related to instructional design and delivery. Therefore, instructors must seek ways how to encourage distance students, guide them in the use of resources as well

as organize interaction between individual participants of online course. The latter is believed to be the most important issue in maintaining an effective interaction in distance learning.

Overall, participants view distance learning as a useful experience. The respondents' preferences are obvious in their answers to the question "*What would you prefer if you had an opportunity to choose the form of learning at this very moment?"* Fully online distance learning is preferred by 53.1%, while 46.9% find traditional in-class study more attractive. But at the same time these answers are apparently contradictive to what we refer to as the "quality and effectiveness of education" if we take into consideration that only 5.7 % of students evaluate online learning as more effective compared to the traditional or blended modes. This figure is disappointing for the enthusiastic supporters of distance education. Ultimately, in students' opinion, the idea associated with good quality learning is implemented relatively equally in blended learning (33. 5%) and traditional in-class activity (45.5%) but not in fully online learning.

4. Conclusion

To conclude, the research findings demonstrate a relatively high students' satisfaction with their distance learning. At the same time, we found that there are some controversies in the ways, in which students evaluate the effectiveness of their distance learning compared to other education patterns. Being positively motivated to take an online course of study, they, nevertheless, face a number of challenges while learning at a distance. These involve low self-organization, lack of control on the instructor's side, lack of effective interaction and sense of isolation, which obviously decrease their satisfaction with online learning experience. These findings prove the thesis that to be highly successful and effective distance learning requires considerable attention and commitment on the part of faculty. The role of faculty is manifested in the way the instruction is designed and delivered as well as in the faculty ability to incorporate relevant course content with the emphasis on student support, interaction and assessment techniques as these are the key issues in effective distance learning. Therefore, instructors are to design educationally effective, high quality programs, and maximize the ICT interaction potential in virtual learning environment. This goal can be attained if instructors are subject to extensive training on how to utilize new technologies and adapt teaching methods to distance learning environment as well as monitor and assess students' progress. Given all three actors - students, instructors and administration - make joint efforts, the overall student satisfaction with online learning is bound to increase. This will lead to higher quality of distance education.

These conclusions are consistent with those provided by other authors. We also suggest there must be conducted the faculty survey to identify their perception of distance learning issues. Such research will assist the university stakeholders in spotting the ways to reveal distance students' full learning potential.

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