

MOOCs in Higher Education: Advantages and Pitfalls for Instructors

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Abstract. The article explores the advantages and pitfalls of Massive Open Online Courses (MOOCs) as reported by participants of professional development programs on creating and using online courses initiated by the Institute of Distance Education of National Re-

search Tomsk State University during a brainstorming session within one of the programs and during communication in a nonpublic online course forum within another one. It is established that instructors see MOOC advantages in the opportunity to provide better organization of the learning process and learning materials, higher education accessibility and academic mobility, realization of instructors' career and personal goals, and resource efficiency. MOOC pitfalls are associated by the participants with pedagogical imperfections of the format, special requirements for the education system, resource intensity, and career risks for instructors.

Keywords: higher education, Massive Open Online Course (MOOC), online learning, career risks for instructors, resource efficiency, resource intensity, education accessibility.

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The concept of human capital suggests that the knowledge and skills that people possess enable them to create value in the global economic system [World Economic Forum 2017:3]. The 21st century requires that professionals learn new technologies and upgrade their competencies on a regular basis. Russia ranks 37th in terms of digital skills among population and 66th in terms of the extent of staff training out of 140 economies [World Economic Forum 2018:485]. In October 2016, the Presidential Council for Science and Education adopted the national priority project Modern Digital Educational Environment in the Russian Federation, which has the potential to improve the situation

in the future. The project aims to create conditions to enable consistent enhancement of lifelong learning quality and opportunities for all population categories. The project developers suggest achieving this goal by advancing Russia's digital learning environment and increasing the number of students with MOOC experience from 35,000 to 11,000,000 by the end of 2025.¹ In 2017, the Ministry of Science and Education of Russia held a grant competition and selected 16 universities to be at the wheel of integrating various initiatives to achieve the project goals². Those universities are the change drivers, drawing other colleges to promoting online education.

It was in 2012 that Western universities embarked laboriously on the production of massive open online courses (MOOCs). The MOOC format implies an unlimited number of participants, no selection process on whatever criteria, permanent accessibility of the course content online, and total study load for a participant being at least 1 ECTS (credit)³. What motivates universities to develop MOOCs? First of all, they seek to provide more flexible learning opportunities, increase institutional visibility, reach new students, and experiment with innovative pedagogy [Jansen, Konings 2017:20]. However, the importance of MOOCs in embracing innovative pedagogy has diminished in the eyes of university administrators in the United States and Europe [Allen, Seaman 2015:35, Jansen, Konings 2017:17], and instructional quality of MOOCs was found to be low [Margaryan, Bianco, Littlejohn 2015:82].

In a situation where research interest in MOOCs has weakened and their instructional value has been called to question, it is important to find out how they are perceived by university instructors. Instructors' contribution to the development of online education is hard to overestimate: they develop courses, integrate them in their disciplines, and shape or at least affect students' perceptions of MOOCs as a result of regular instructor-student interactions. Therefore, university professors are extremely significant, if not key agents in the integration of online education. It appears thus even more surprising that instructor-related MOOC research has been very limited so far, as a number of studies indicate [Evans, Myrick 2015:295; Deng, Benckendorff, Gannaway 2017:179; Veletsianos, Shepherdson 2016:214; Liyanagunawardena, Adams, Williams 2013:216–217; Deng, Benckendorff, Gannaway 2017:9; Bozkurt, Ozdamar Keskin, de Waard 2016:204].

¹ Modern Digital Educational Environment in the Russian Federation: <http://neorusedu.ru/about>

² Podvedeny itogi pervogo etapa proekta "Sovremennaya tsifrovaya obrazovatel'naya sreda v RF" [Summary Report of the First Phase of Modern Digital Educational Environment in the Russian Federation]. *Uchitel'skaya gazeta*, April 13, 2018: <http://ug.ru/news/24799>

³ Definition Massive Open Online Courses (MOOCs), 2015: https://openedu.eu/images/docs/Definition_Massive_Open_Online_Courses.pdf

Russian studies focusing on MOOC instructors' attitudes, experiences and teaching recommendations are even less numerous than those in English. Meanwhile, findings in this area of research could serve the basis for effective managerial decisions in the digitization of education.

Given the broad definition of the term "perceptions", this study only explores how instructors perceive the advantages and pitfalls of MOOCs. Thematic analysis is used to clarify the position of Russian faculty on this issue and compare to the international context.

1. Evolution of the Issue: The International and Russian Contexts

Since MOOCs originated in the United States and then made their way to Europe, it appears advisable to analyze the Russian context of the problem within the global framework. A search across English-language publications presenting findings of empirical studies and reviews yielded 18 articles authored by researchers in Australia, England, Hong Kong, Spain, Columbia, Romania, Singapore, the United States, and Switzerland: Deng, Benckendorff, Gannaway 2017; Evans, Myrick 2015; Gil-Jaurena, Domínguez 2018; Lin, Cantoni 2018; Literat 2015; Lowenthal, Snelson, Perkins 2018; Ospina-Delgado, García-Benau, Zorio-Grima 2016; Ulrich, Nedelcu 2015; Zheng et al. 2016; and also Agarwal 2012; Allon 2012; Belanger, Thornton 2013; Duneier 2012; Evans 2012; Head 2013; Kaul 2012; Kolowich 2013; and Roth 2013—presented in a review [Hew, Cheung 2014]. The MOOC advantages and pitfalls identified across the publications listed above can be grouped into thematic clusters.

MOOC advantages, as perceived by instructors, are divided into three groups.

1. Opportunity to provide better organization of the learning process and better content structuring.

Instructors believe that MOOCs promote flexibility in learning by combining different formats and improve the quality of MOOCs and their offline equivalents as a result of learner reviews.

2. Realization of instructors' career and personal goals.

This category of MOOC advantages includes:

- Advertising opportunities (promotion of a specific MOOC, the university that developed it, and other courses taught by the same instructor);
- Experience of working with the new education format (analyzing and experimenting with innovative teaching approaches; opportunity to teach to a broad and diverse audience);
- Opportunity to fulfill instructor's personal aspirations (working to establish a reputation; a chance to be the first to launch a MOOC among the faculty; a way to extend the list of achievements; establishing new connections);
- A chance to share one's knowledge and experience (contribute to

open education, increase visibility of one's discipline, and engage in knowledge communication as such);

- Embracing the research potential of the new education format (MOOCs offer a possibility to reach large audiences and can be used as an experimental ground for trying out new teaching methods, conducting sociological, pedagogical and other types of research, etc.);
- Financial incentives (offered by some universities for MOOC development);
- Professional growth and certification opportunities (upon completing a course, learners (the instructor may act as a learner) may apply for a certificate of completion, provided that they meet the developer and platform requirements).

3. Accessibility and social mobility (MOOCs are accessible to a wide audience including adults and learners from other countries, suitable for self-paced learning, and free—having originally emerged as a way to get free access to top professors' courses).

MOOC pitfalls, as perceived by instructors, are grouped into four categories.

4. Pedagogical imperfections of the format:

- Challenges associated with teaching heterogeneous audiences with different levels of educational attainment, national characteristics, and cultural backgrounds;
- No face-to-face interaction with students, which includes the feeling of "talking to a wall" when recording video lectures, lack of immediate response from students, and low student activity even in forum discussions;
- Limited possibilities for student assessment (since a MOOC can be attended by hundreds and thousands of learners, assessment of assignments cannot be done by the instructor, so automatic assessment procedures are used; however, tests with multiple-choice and matching questions are the only ones that platforms assess unfailingly accurately);
- Imperfection of the system as compared to offline education (low learner engagement, limited teaching strategies, and inapplicability of success indicators typical of traditional classrooms, such as low student attrition rate).

5. Special requirements that MOOCs impose on the education system.

International findings indicate that faculty policies should change to ensure successful integration of MOOCs in traditional classrooms. In particular, the following is required:

- Provide strong administrative support for MOOC instructors to maintain their motivation to work under the new format; resource,

- political, and technical support; acceptance of MOOCs (MOOCs should be included in professors' teaching hours instead of being part of their extra workload; resources should be allocated for course-related research; additional time should be provided for content development);
- Provide assistance in MOOC production and coordination (tutoring and forum administration; technical support in course development, creation of audiovisual and interactive course materials, and MOOC didactics);
 - Ensure protection of MOOC instructors' copyright;
 - Solve logistic issues associated with collaborative course development, which usually implies participation of diverse experts.
6. Resource intensity (both MOOC production and interaction with learners are highly time-consuming; high financial and labor costs; high stress levels during course development).
7. Professional risks (reputational risks for professors creating an online course as a new educational product and bringing it to the global market).

Now, as we have got an idea of global research findings on instructors' perceptions of MOOCs, we can move to describing the situation in Russia. The number of Russian-language MOOC-related publications peaked in 2015–2016, 3–5 years later than on other countries. This gap closed over time, so that in 2016–2018 Russia, the United States, and Europe engage almost simultaneously in experimental, research, and development activities designed to regulate the use of online courses and integrate them in traditional classrooms.

Of all the MOOC-related publications in Russian discovered, only one meets all our requirements. Yana Roshchina, Sergey Roshchin, and Viktor Rudakov [2018] used a survey of instructors and students to find out their perceptions of MOOC advantages and pitfalls. As for the rest of the publications, we only sampled those in which instructors described their own experiences of creating or using MOOCs or administrators described their interaction with MOOC instructors. The resulting data was distributed among the same thematic clusters as the English-language publications. The following groups of MOOC advantages perceived by Russian instructors have been identified.

8. Opportunity to provide better organization of the learning process and learning materials:
- Self-paced learning, use of modern methods and materials, course diversity [Roshchina, Roshchin, Rudakov 2018:183–184];
 - Possibility to make distance students work consistently between exam sessions [Vaganova, Telegina 2017:125];

- Assistance in unlocking learners' potential and "developing their professional and personal qualities" [Mozhey, Lukyanov 2017:45];
 - Availability of self-study materials for students; automated or peer-review assessment of student assignments [Zhuk 2016:237];
 - Increased tutoring assistance; implementation of problem-based learning by integrating offline university courses with top professors' MOOCs [Mozhaeva 2016:237].
9. Realization of instructors' career and personal goals:
- Professional self-development [Roshchina, Roshchin, Rudakov 2018];
 - Acquisition of new competencies [Yelizaryeva 2016:98].
10. Accessibility and mobility (wide access to education [Roshchina, Roshchin, Rudakov 2018]).
The MOOC pitfalls identified in papers written in Russian have been divided into three groups:
11. Pedagogical imperfections of the format:
- No "live" student-professor communication, personalized learning, or learner identity verification opportunities; high attrition rates; decrease of education quality; charges for receiving a certificate of completion [Roshchina, Roshchin, Rudakov 2018:183–184];
 - Challenges of instructor-learner communication [Azimov 2014:6];
 - The "authorship verification problem" and fixed MOOC integration schedules that may conflict with the academic term dates [Zhuk 2016:238].
 - Resource intensity (MOOC production requires heavy investments of money, time, and effort [Agapova 2015:40]).
Special requirements that MOOCs impose on the education system:
 - Instructors must develop on-camera skills [Yelizaryeva 2016:98],
 - Learners must have a high level of general cultural [Malkova et al. 2018:0578]

As we can see, MOOC instructors surveyed in Russia and other countries see MOOC advantages in the opportunity to provide better organization of the learning process and better content structuring, realization of instructors' career and personal goals, accessibility and social mobility. International findings indicate that MOOC pitfalls perceived by instructors include pedagogical imperfections of the format, special requirements to the education system, resource intensity, and professional risks for instructors. Russian professors report the same disadvantages except professional risks inflicted by the promotion of online education—no mention of this factor was found in the publications analyzed.

The survey data demonstrates that instructors describe their perceptions of MOOCs from the position of MOOC developers or integrators, being less likely to judge from the perspective of MOOC learners. Western professors tend to take on the role of MOOC developers more often, while Russian instructors talk from the position of authors as well as integrators.

This literature review shows that research in Russian instructors' perceptions of MOOCs is very limited. Available papers focus on instructors' perceptions of MOOC advantages and pitfalls related to the pedagogical aspects of MOOC production and implementation. Other types of benefits and drawbacks are only addressed in isolated publications, and professional risks are not mentioned in any article at all. Does it mean that those dimensions of online education are irrelevant to Russian professors? How do they perceive MOOCs in the context of active integration of online education that Russia sees in the recent years? How do their perceptions align with the global experiences? These are the questions that this study attempts to answer.

2. Method and Data

2.1. Participants

To collect accurate data on professors' perceptions of MOOCs, we needed respondents who would understand what a MOOC is and how exactly it is created and/or implemented, have some teaching experience to analyze MOOCs in its context, and not advocate explicitly either of the two dissenting opinions existing in the MOOC discourse. All of these criteria are met by participants of the professional development programs on creating and using online courses administered by Tomsk Regional Center of Online Education Competencies under the auspices of the Institute of Distance Education of National Research Tomsk State University, which took place in October 2017–June 2018. Those programs involved a total of 458 participants representing educational institutions (mostly universities) of all federal districts of Russia, including five faculty members from Kazakhstan and Belarus. Instructors accounted for the majority of survey participants.

2.2. Data

Perceptions of MOOC advantages and pitfalls for instructors reported by the participants of professional development programs during a brainstorming session within one of the programs and during communication in a nonpublic online course forum within another one provided the empirical basis of the research. Data was generated collectively in the former case and individually in the latter. A total of 272 judgments were singled out and analyzed.

2.3. Method

The respondents' judgments about MOOC advantages and drawbacks were grouped into thematic clusters based on the classification developed as a result of international literature analysis (which yielded a broader array of themes): opportunity to provide better organization of the learning process and better content structuring, accessibil-

ity and social mobility, realization of instructors' career and personal goals, pedagogical imperfections of the format, the need to adjust the education system to the new format at a number of levels, resource intensity, and professional risks. The judgments that did not match any of the themes specified were grouped into additional categories.

3. MOOC Advantages for Instructors

Most judgments about MOOC advantages can be distributed among the three groups identified during the review of MOOC-related publications in the English language. The rest of the judgments formed an additional group, resource efficiency for instructors. Below, each of the four groups is examined in detail.

3.1. Opportunity to provide better organization of the learning process and better content structuring

The survey participants believe that better organization of the learning process allowed by MOOCs primarily manifests itself in learner autonomy. Students work actively with study materials, and instructors monitor performance of every student by delegating routine assessments to the platform algorithms (which makes assessment fast and unbiased).

“Online courses are a very efficient way to get students to work independently. This type of learning requires a high degree of responsibility. This is what Russian students sometimes lack, as compared to Western Europe where self-organization is encouraged.”

An important advantage of online courses is that they allow building personalized learning trajectories, whether in general or to achieve specific customized goals. In particular, a student might want to progress through the course at a higher speed in order to get ahead of the syllabus or, vice versa, to catch up if they dropped out for some reason. When a student has to take make-up exams in certain courses after taking a parental or sick leave, going on a trip, or transferring to another university or department, engaging in an online course within a for-credit program is a good option.

Using MOOCs also contributes to reallocation of student learning time. The lack of teaching hours for specific topics is compensated for by using online courses, and the freed classroom time is devoted to other types of work. In the former case, the respondents mean that students use online courses to learn some important material that used to be left out of the curriculum due to the lack of time. In the latter one, online courses are used to embrace material that professors normally delivered in the classroom.

“MOOCs will save instructors from telling the same naked theory over and over again in lectures, as it can always be read or watched online. I do not believe that MOOCs can completely replace live professor lectures, but an adequate mix of the two is a must.”

Once a topic has been embraced independently in an online course, live classes can be devoted to question answering, practical sessions, etc.

“If I use online resources, I will be able to enhance certain interactions with students and devote more time and effort—cognitive and emotional—to other types of interactions that constitute the value and meaning of pedagogical communication.”

A mixed format combining in-class and online education is regarded as possibly the best way to redistribute the learning time allocated for specific disciplines, as it implies flexibility and a certain degree of novelty, which has a positive impact on student involvement.

The survey participants do not associate the transition to online courses with a decrease in communication with students. In fact, they report that this approach allows “extending the array of interactions with students”, exchanging “immediate feedback with learners in forums”, and even “communicating with students 24/7.”

Some characteristics of MOOC content were also emphasized by the respondents. Abundance and diversity, for instance, were reported to enrich the learning environment. Another important characteristic of online courses is their illustrative value. Some courses include video lectures recorded at manufacturing sites, animation of invisible processes, simulators of rare or hazardous equipment, and many more. It was also pointed out that online courses normally present material in concentrated form, enhancing learning effectiveness and reducing the time required to master new knowledge and skills.

3.2. Accessibility and mobility

Characteristics of MOOCs as such are described by the respondents as closely connected to those of MOOC content. Accessibility of online education is associated with the possibility of reaching broad audiences, which may include “prospective college applicants, students, and candidates in full-time and distance education programs as well as people with disabilities.”

“If the physical learning environment is unable to offer ramps to wheelchair users and elevators to cerebral palsy patients, online learning is the only way to show them that we do care and that we are willing to provide them with education opportunities.”

Mobility that MOOCs offer implies that students can learn “anytime, anywhere”, course content can be “accessed online 24/7”, and instructors can engage in effective interactions with students remotely, regardless of location.

3.3. Realization of instructors' career and personal goals

According to the study participants, online courses offer opportunities for professional growth to instructors, who can use them to acquire

new competencies and experience, “outline directions for further career planning” (obviously, professors expect MOOCs to remain a viable direction in education development in the foreseeable future), and enhance their level of expertise.

“In my professional practice, I want to be interesting to students not only as a teacher of English but also as someone who is ahead of them in technology and can offer various methods, formats, and resources for their learning activities.”

Online courses that instructors integrate in their disciplines may be created by other professors, so MOOCs also encourage professional communication and academic networking, allowing instructors to adopt the pedagogical and creative practices followed by their colleagues and use them to change the way they deliver course material. At the same time, development of their own MOOCs allows professors to “express themselves”, “be creative”, “share their methodological insights with the community”, “popularize their own ideas”, and “promote themselves”. Since some universities provide instructors with financial awards or online course development, additional income was also mentioned among the benefits of MOOCs.

3.4. Resource efficiency

The additional group of MOOC advantages that were not identified in English-language publications includes the benefits associated with saving instructors’ resources. First of all, this is about time saving. While the first group of advantages involved saving time to devote it to other types of learning activities—such as those that imply a higher degree of learner-instructor interaction than in lectures—in this case instructors increase their off-work time, which they can use as they wish. This includes reduced classroom workload (instructors simply work less), flexible schedules, more opportunities for rational time planning, and “using software instead of wasting time on far-away trips.” The participants mentioned other types of resources as well, most often “physical” and “vocal”, which can be saved by using video lectures, presentations, and practical tasks offered by MOOCs. It was difficult to identify exactly the type of resource in some responses, as it could be any one or all of them at once: online courses “partly free instructors from in-class sessions”; “having once created a course, you can use it over and over again, with some adjustments”, “no need to reproduce theoretical material in lectures.”

4. MOOC Pitfalls for Instructors

Below, we present the results of analyzing the judgments about MOOC pitfalls for instructors. This time, all the clusters identified in the English-language publications are represented in the Russian-language articles as well.

4.1. Resource intensity As the survey participants report, online courses involve considerable labor costs, “higher than in the traditional system”. They are unavoidable at every stage of working with MOOCs: development (“the need to devise a course structure in advance”), assistance on the MOOC platform and regular content updates (“course materials must be updated all the time”) or editions, if needed (“a course may require some adjustments before being offered on a different platform”).

“Sometimes it can be even more challenging than teaching in the classroom. Meanwhile, how much a professor earns depends mostly on the number of their classroom teaching hours.”

Pay injustices that this respondent complains about result from the fact that classroom workload in online courses, due to their short duration, is smaller than in their offline equivalents.

Instructors who do not develop online courses but only use the ones that already exist also experience extra labor costs due to the “need to restructure the course and adjust the ratio of lectures, practical seminars, and independent work”. Not only are all of those activities fraught with extra labor costs (“damage to health”) but they are also time-consuming.

Resource intensity of using online courses in education also manifests itself in the “fee- or conventional fee-based nature” of MOOC platforms. MOOC learners may be required to pay for a proctoring service (identity verification and authentication system), certificate of completion, or access to graded quizzes or other components of the course (such as with Coursera’s Premium Assessment package). Furthermore, even enrollment in a free online course requires an Internet accessing device (PC, smartphone) and prepaid Internet services. For this reason, universities are trying to find answers to the following questions: should the opportunities offered by MOOC platforms be paid by students or universities incorporating MOOCs in their curriculum? how to organize the payment procedure correctly? how to pay professors who “delegate” some topics to the MOOC creator to reduce their own classroom workload? should universities revise the allocation of funds received for public-funded students who engage actively in online courses of another university? These questions overlap with the group of MOOC pitfalls “special requirements to the education system” that will be described later on in this article.

4.2. Pedagogical imperfections of the format While appreciating the opportunity to enhance the learning process, the respondents often complained about pedagogical imperfections of MOOCs. These include difficulties with student monitoring in the first place, caused by issues in learner identification and peculiarities of assessing learning outcomes in large-scale online classrooms. With online learning, it is hard to guarantee that a learner has not cheated,

copy-pasted a peer's answer, or asked someone who is better in the subject to do the assignment for him or her.

Instructors claimed that using third-party MOOCs for blended courses, they lack the opportunity to see their students' grades achieved on the platform. Students submit a copy of certificate issued by the platform, which may be a fake, and demonstrate a record of grades in their personal profile or their final exam performance report confirming the acquisition of required competencies (provided that the final assignment was designed correctly). Instructors may test students' knowledge of course material as a re-assessment or topic-specific assessment. The most relevant and accurate solution to the problem of informing professors about student performance on a MOOC platform is to ensure that platforms provide learner performance data to universities, these data exchange may be a part of the partnership agreement between the university that uses a MOOC and the one that has developed it. For example, partnership agreements regulating the courses offered by the Open Education platform involve creating a personal account for the integrating university where all the information about affiliated students and their academic performance is displayed.

The guarantee that educational outcomes exported from the platform were obtained by the enrolled learner and not someone else has been getting stronger due to advancements in proctoring services. Proctoring systems rely on the typing style, voice patterns, and facial expression to verify that the person doing an assignment is the one that registered for the course. Facial expression is compared against the photo in the user's ID, which contains personal data that should also match with the information submitted during the registration process and specified in the certificate of completion.

Another problem of student monitoring in MOOCs concerns the "methodological limitations of platform knowledge and skill assessment tools". The most widespread type of MOOC assignments today is multiple-choice tests, sometimes matching and short-answer questions—all assessed automatically. This format of knowledge testing entails a number of constraints: first, tests are not effective for all levels of knowledge; second, answers should match exactly the sequence of symbols accepted as correct by the system. An error in one symbol (e. g. comma/period as a decimal separator) may result in counting the item incorrect, whereas in live interactions, instructors could consider such errors insignificant.

Today, online education platforms offer three alternatives to automated assessment. The first one, instructor assessment, is applied extremely rarely due to the size of audiences. It is normally used to assess some special types of assignments, such as those submitted for competitions, or when a disputable situation needs to be resolved, e. g. when a learner does not agree with the results of automated or peer assessment. The second alternative is self-assessment, where

learners upload their assignments and are given assessment criteria. The third alternative option is peer grading, which implies that an assignment is assessed according to the instructor's criteria by a randomly selected peer learner. There is some skepticism about the latter two methods among instructors, as they consider learners "under-qualified to perform the assessment procedure".

The problem of assessment gets particularly serious when it comes to final assignments, which require a higher level of knowledge than merely being able to reproduce facts, especially in applied courses. The factor of large audiences makes peer assessment the only sensible method to assess performance in final examinations, which have an essential weight in the final course grade. That being so, none of the alternatives to automated assessment is perfect.

The lack of active "live" communication is another drawback of online courses perceived by professors as representatives of a person-to-person occupation.

"It is funny that students have been asking for additional offline lectures over the last two years, and they just do not want the online format. What is the most interesting is that when I do include a real-life class, the attendance rate is 100%."

"Since we are working with a generation that knows little or nothing about how to communicate, propagation of online learning will exacerbate the communication issues."

"In a number of occupations, the ability to speak and communicate with customers is an indispensable skill! To my utter dismay, our students do not know how to communicate." Some respondents relate the lack of communication in online courses to a broader context of "no authentic vibe" and "depersonalized learning".

Apparently, all these limitations have adverse effects on instructors' trust in the new educational technology. This can be illustrated by the following statements.

"I am afraid that the development of online learning may go along the path of replacing professional education with shallow knowledge—we already observe some manifestations of that, like MOOC credits shifts."

"I suggest that this type of education will end up with people who want to be always in advance of everyone else in whatever domain, grasping all the "trendy" opportunities and hyping them up—naturally, for the sake of technology enhancement and modernization, which actually generate very questionable outcomes."

4.3. Special requirements to the education system

The survey participants admit that the integration of online courses requires changes to the education system. Inconsistencies between the existing system and the innovations being introduced can be identified based on the system elements the respondents believe should be affected by those necessary changes.

Students lack “qualifications” to engage in online courses, but this is the question of self-organization, self-control, time management, and other soft skills, not hard ones. The problem of student performance monitoring discussed above is relevant because online education implies a high level of self-organization. However, “the proportion of highly self-organized students is small; where independent work is of particular importance (e. g. in distance education), students often ignore it completely, accumulating incomplete assignments or doing them as a mere formality,” a survey participant says. Because of low student self-organization, another respondent insists that “using MOOCs in Bachelor’s degree studies should be avoided.”

To create and use online courses, instructors need to embrace new competencies—such as on-camera skills—but they also need to enhance the skills they already have, as MOOCs impose “increased requirements to course content development and structuring”, and “technologically, creation of an online course is more time-consuming and requires more knowledge and competencies.” Those requirements may be fulfilled by involving audiovisual media designers and experts in instructional methodology to course development. As one of the participants said, “a good MOOC is a product of a big team’s efforts.” In case the university does not provide instructors with an adequately qualified assistance team, MOOC developers may have to do all the work themselves, which often implies self-training.

Anyway, high requirements to MOOC quality remain relevant. First of all, online courses bring professors’ work to a high level of transparency, as every lesson in a MOOC is open. Second, online courses compete for learners and sometimes their money, so a MOOC must be in demand with an audience wide enough to attract a great deal of interested customers, while at the same time it must be unique to some extent to be chosen by prospective customers. It also must be difficult enough to offer new knowledge and at the same time easy enough to be taken alongside other courses and completed successfully. The survey participants believe that the established system of MOOC production and use has some features that affect negatively the quality of learning, which include “subjectivism in content assessment” at the stage of production, a low level of difficulty (“I wish they were more effective”), and inability to change third-party courses.

Some respondents were not sure that every professor could adapt to the online education reality: “not every instructor may be able to create a course due to their personal characteristics”, such as “lack of charisma” or this is not a format for the third-age faculty”. The respondents’ judgments also reveal instructors’ unwillingness to adapt

to the new format, the “need to change” being reported as a disadvantage of MOOCs.

“Most professors are not willing—and will hardly ever be—to break their ‘equilibrium’. They are used to giving classroom lectures and reading the same content over and over again. Those who decide to try, however, may fall into the hands of instructional designers who are not bound up in MOOCs but simply follow the formal design principles. It is not the quantity but the quality of MOOCs that matters.”

It is not only students and professors who are not ready to embrace the new format—neither are university administrators. “The parties involved—including universities, faculties, and departments—are unprepared on a technical, psychological, and other levels to use” MOOCs, “encourage the integration of MOOCs”, and actually “accept MOOCs and IT in general as part of education”. Unpreparedness of the national education system, according to the respondents, consists in the “absence of any legal regulations in the field today”, or “clearly defined standards of incorporating online courses in student workload”, or “unified course development principles”.

“The key difficulties with using online courses in higher education are the lack of a comprehensive regulatory framework, the ambivalent ways in which the existing regulations are interpreted by law agencies, and uncertainties about the licensing and accreditation procedures.”

Although the survey was conducted after the priority project Modern Digital Educational Environment in the Russian Federation was initiated, faculty’s incompetence in the legal issues related to online education is obvious. Probably, even the availability of a national regulatory framework, in the absence of local university guidelines, leaves faculty members unconfident about finding acceptance and approval of their actions, which might be the reason for low instructor engagement in the development of online education.

The overall focus on education digitization is not lost on the survey participants, yet it inspires ambivalent feelings in them.

“The necessity of using online learning is being actively imposed on us, and even professors whose disciplines are not really compatible with online courses are forced to use them.”

“At some point, it will become mandatory for professors, but no additional time to develop quality courses will be offered. I wish so much we could stop doing something for the sake of doing and start achieving measurable outcomes at last.”

4.4. Professional risks The MOOC pitfalls classified as professional risks for instructors are mostly associated with the threat of losing job as a result of the integration of online courses into traditional classrooms, in particular the “possibility of pay cuts, given that a single instructor can now reach a wider audience”, hence the “fear of being unwanted and needless”. The survey participants believe that neither MOOC integrators nor MOOC developers are protected against being forced out by online courses.

“Once I have developed a MOOC, my institution does not need me anymore. The knowledge has been digitized, and forums can be administered by someone else.”

“MOOCs, if regarded as an alternative, all other factors being equal, can actually compete with instructors.”

“The instructor disappears as a charismatic personality, which used to be a powerful factor of students’ interest in a subject.”

Another professional risk incurred by MOOC instructors, particularly MOOC developers, is the “alienation of title”, which is about instructors transferring their copyright for a course to the employer, i. e. the developing university. In this case, it is the university, not the instructor, that selects the platform to offer the MOOC on and decides on the timeframes, access modes, monetization models, and so on. It is only if a university has those rights that an online platform will interact with it on the issues related to the course. Otherwise, platforms would have to negotiate organizational issues with each MOOC instructor individually. However, an alienation of title agreement does not exclude the possibility of negotiating those decisions with the instructor and prevents the university from referring to another person as the MOOC developer, meaning that copyright remains with the instructor who created the MOOC.

To summarize, a thematic analysis of survey participants’ judgments revealed MOOC advantages and pitfalls for Russian instructors, which were distributed among the seven clusters identified on the basis of English-language publications, and one more cluster (resource efficiency) was added. The identified groups of MOOC benefits and drawbacks indicate that instructors recognize not only different but sometimes even contradictory qualities of online courses—the opportunity for better organization of the learning process and better content structuring along with pedagogical imperfections of the format and special requirements imposed by this format on the education system, resource efficiency along with resource intensity, realization of career and personal goals along with professional risks. Those advantages and pitfalls of MOOCs are perceived at all levels, by instructors as developers (new competencies, additional income), integrators (resource efficiency), and learners (certification).

5. Conclusion This study systematizes the findings from Russian and international publications on MOOC advantages and pitfalls for instructors and provides an independent analysis of faculty members' judgments on the issue.

Judgments of 458 respondents are analyzed. Although the sample is fairly large, all the survey participants engaged in professional training programs on online education, which implies that they are likely to be committed to MOOCs. Consequently, the findings could hardly be extrapolated to all faculty members including professors—some of them may be strongly opposed to the format, and others may be totally unaware of it. However, the sampled instructors pointed out advantages as well as pitfalls of MOOCs, which means that even if the analysis results do not provide a comprehensive picture, they do reflect the current trends. Moreover, the MOOC disadvantages identified in this study indicate the hotspots which are so prominent that even MOOC advocates can see them. Further research involving instructors alone and diverse MOOC experiences will shed more light onto the findings obtained herein.

While being committed to the online learning system, the survey participants are poorly informed about MOOCs. Some professors mentioned the learner identity verification problem, which is now perfectly solved by proctoring services. Others described MOOCs as a source of extra income for instructors, but their understanding of the applicable pricing policies and pay rates is doubtful.

Notwithstanding the data limitations, the congruence of our findings to the inferences made by Russian and international researchers may be regarded as evidence of their credibility and adequacy of the research method selected. Concerning the Russian-language literature, the strong belief among our respondents that MOOCs allow for better organization of the learning process and better content structuring aligns with the findings obtained by Kristina Mozhey, Dmitry Lukyanov, Natalya Vaganova, Olga Telegina, Galina Mozhaeva, and Yana Roshchina with colleagues, the idea of the new format as a means of realizing instructors' career and personal goals—with the inferences made by Yulia Yelizaryeva, the perception of accessibility and social mobility as MOOC advantages—with the article by Roshchina and her co-authors, and the thoughts on resource efficiency—with the findings of Lyudmila Zhuk. The pitfall of pedagogical imperfections, which surfaced in our dataset, was mentioned in the publications by Elkhan Azimov, Roshchina, and Zhuk; additional requirements imposed by online courses on the education system were also identified in the studies by Yelizaryeva and Irina Malkova with her colleagues; resource efficiency was discussed by Nina Agapova. A novel finding is the group of disadvantages that has never been addressed in Russian literature before—that of professional risks incurred by MOOC developers and integrators.

The groups of MOOC advantages and pitfalls derived from Russian faculty's judgments come very close to the classifications proposed by researchers in other countries. Only two MOOC benefits reported in the international literature did not manifest themselves in the Russian data, (i) the opportunity to improve the quality of MOOCs or their offline equivalents using platform analytics and (ii) embracing the research potential of the new format. The Russian survey participants did not mention three MOOC disadvantages, (i) challenges of teaching audiences with diverse educational and cultural backgrounds, (ii) logistical problems in collaborative MOOC development, and (iii) reputational risks incurred by developers. All the three have to do with instructors as MOOC creators, not integrators. Perhaps, those disadvantages were not observed in this study because the survey participants were rather willing to assume the perspective of using MOOCs than creating them, which reflects the situation in Russia in general. In particular, key performance indicators of the priority project Modern Digital Educational Environment are the pace and scale of integrating online courses in higher education, not developing them.

Our study has discovered themes that have no equivalents in the international literature reviewed. These include the whole "resource efficiency" group (probably resulting, again, from the role of instructors as MOOC integrators widely assumed in Russia today) as well as some specific advantages (more communication with students) and pitfalls (high requirements to student self-organization and self-control skills). Adverse career effects of working with MOOCs for Russian instructors are associated with the risk of being dismissed from the university—not reputational risks, as for their international counterparts.

Possible replacement of instructors with online courses has been widely covered by the media, raising great concerns among professors—not only prospective MOOC integrators but also MOOC developers. The concerns will probably persist until a legal framework regulating the rights and obligations of instructors creating and using MOOCs in blended learning environments is elaborated and brought to the attention of all the parties involved.

Another problem, resource intensity of MOOCs—often referred to in Russian faculty members' judgments and thus requiring to be addressed by national MOOC stakeholders—can be alleviated by designing and disseminating the models and algorithms of online and blended course design among the instructors.

The opportunity for better organization of the learning process and content structuring is the advantage reported most often by higher education faculty in Russia as well as globally. At the same time, professors admit pedagogical imperfections of the MOOC format. On the one hand, this position of instructors may result from their personal unsuccessful experience of transferring their pedagogical ideas to online or blended learning courses. On the other hand, it may be

a manifestation of protest against the new technologies in education, which “cannot be better than a live instructor” or just an expression of the broad academic community’s opinion in the absence of personal MOOC experience. This study did not find out the motivations behind those judgments, so it might be the subject of further research. If it turns out that instructors are actually unhappy with how pedagogical issues in online courses are solved based on their own MOOC experience, discussion must be initiated on doing large-scale research into instructors’ perceptions of MOOC enhancement opportunities and engaging professors in solution development, implementation, testing, and optimization.

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