NEW APPROACHES TO ON-LINE COLLABORATION IN TIMES OF COVID19 PANDEMIC

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Abstract

On-line collaboration has become a vital necessity and a beneficial instrument of providing continuous educational process under the COVID-19 pandemic. Since health security reasons forced governments to introduce lockdown and social distancing rules, the educational establishments in many countries made considerable efforts to meet new demands.

The paper focuses on the results of the research into advantages and disadvantages of on-line collaboration in educational process. Students and teaching staff of the linguist and non-linguist faculties of the MGIMO University and MIIT University took part in 7 questionnaires which were especially elaborated to find out the attitude of students and teaching staff to on-line education, its challenges and opportunities. All in all 217 students and 25 members of the teaching staff (tutors, teachers and lecturers) participated in the research with the use of case-based reasoning system to analyze on-line collaboration between students, between students and teaching staff, between members of the teaching staff in digital learning and educational environment.

The first two questionnaires were aimed to assess students' abilities to adapt to new educational rules and learning environment. They proved that it was rather easy for most students to embrace changes in educational approaches and procedures. In some cases remote work with the use of IT technologies had been implemented long before the COVID-19 pandemic. The universities participating in the research had introduced mentorship and internship programmes, business incubator facilities with videoconferencing classes and supportive collaboration tools before the pandemic broke out. And those faculties that had elaborated and introduced IT innovations in their educational process beforehand find themselves more confident and independent in times of COVID-19 crisis.

The third and fourth questionnaire estimated the attitude of educators to new challenges of the digital educational environment. The research has exposed the so-called "generation gap": most elderly professors have voted for traditional in-person collaboration, meanwhile there is a rather high percentage of "active" professors who have demonstrated eagerness and diligence in acquiring new skills of working in digital environment. Most educators confess that getting used to new tools and methods of digital education is just a matter of time.

The rest of the questionnaires testify that the overwhelming majority of interviewees observe that on-line collaboration serves the interests of protecting human health as well as corresponds to the qualification requirements modern employers seek and encourage in personnel. Nowadays employers quite often expect their staff to work in virtual teams, geographically dispersed. So students should be taught to work and learn digitally: to use the Internet resources effectively, to demonstrate acumen and self-discipline, to brush up their public speaking and presentation skills. Thus, on-line collaboration should pursue these goals.

Keywords: digital education, learning environment, on-line collaboration.

1 INTRODUCTION

The COVID-19 pandemic has brought new challenges in all spheres of life, particularly education and social communication. The recent developments in the sphere of health and life security have had a great and irreversible impact on workings of all universities and other educational establishments. In order to provide continuous educational process the university was forced to introduce urgent measures. First of all, the organization of distant learning, including provision for adequate information technologies and tools, new e-content of traditional language training courses. Secondly, it was

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necessary to build up new e-learning environment, which in its turn urged educators to adapt the traditional teaching methods and elaborate new approaches to collaboration and interaction with students in virtual environment. These two challenges provoked new attitudes to verbal communication in virtual environment. Firstly, people have realized the true value of social interaction and personal contact. In fact, only when human beings were deprived of an ordinary opportunity of communicating with each other in person, eye-to-eye, during the lockdown, they learnt the importance and pleasure of free and safe social personal interaction with the use of verbal means. Secondly, the force-majeure circumstances caused educators and students, in particular, to adapt to new forms of collaboration, on the one hand, and to acquire new knowledge and skills, on the other. On the whole, new approaches to on-line collaboration in the period of lockdown required great concentration of cognitive and emotional abilities of both students and educators. Fortunately, long before the pandemic started the leadership of the MGIMO and MIIT Universities had made great efforts in the sphere of technological renovation of the educational environment by introducing digital mechanisms of effective teaching, learning and monitoring. Now the Universities are actively crafting their independent virtual educational platforms, organizing special courses for educators and students in order to develop their digital proficiency. It's worth mentioning that the universities presented in the research unite professionals who are conducting active scientific research in the spheres of modern languages, professional communication, foreign language training under new conditions.

2 METHODOLOGY

The paper focuses on the results of the research into advantages and disadvantages of on-line collaboration in educational process.

Professionals in the spheres of education and communication are paying great attention to the benefits and ramifications of on-line learning and teaching [3], [9], [10], [11], [13]. On the one hand, the scholars stress new opportunities of getting knowledge and developing (e.g. shared note-taking during lectures in e-learning environments [2], usage of didactic potential of MOOCs [3], acquisition of new skills needed for modern careers [7], [8], personification, individual approach and flexibility [14], [15], the effects of motivational scaffolding [12], etc.)

On the other hand, the researchers highlight that both educators and students need to maintain personal contact in the process of learning and teaching. This collaboration includes new forms of verbal engagement. The researchers mention an increase in students' motivation: they are to set a learning goal, manage time in line with this goal, put in effort, identify their needs and organize their learning to meet those needs, pay attention to learning situations or the learning object, prefer to work with visual elements, enjoy doing research, find it easy to remember and study with visuals facilitating retrieval, prefer to work independently, take responsibility for their learning, and rely on their learning ability. In the study of Ergün & Adibatmaz, the predictors of cognitive engagement were found to be self-directed learning, learner control, audio-visual learning style, logical learning style, and intuitive learning style. These five variables together explained 31% of the total variance in cognitive engagement [5].

Acknowledging the drawbacks of virtual learning, world experts suggest that blending contact and virtual education can be seen as 'a necessary compromise that balances public health and education considerations' [6]. Now it is evident that the pandemic has accelerated the integration of benefits of two schools of educational technology – Logo and CBT (computer-based training). Hence, the designers can select the best of each approach without excluding one another. Scholars suppose that the debate between these schools of educational technology will focus on elaborating new types of interaction in education which can be relevant to the present day situation [4]. They determine virtual learning as 'distance learning conducted in a virtual learning environment with electronic study contents designed for self-placed (asynchronous) or live web-conferencing (synchronous) online teaching and tutoring [14].

The great advantage of using information technologies and the Internet resources is that education can be not only delivered both inside and outside the educational facilities, but also can be enhanced and promoted whereby students and educators are geographically dispersed. Experts have noted a very important aspect of virtual education: students and educators are gaining skills which are necessary for modern jobs as part of telecommuting 'virtual teams': members of such teams have 'to know how collaborate efficiently, conduct online research and analysis, use resources like AI and the cloud, master speaking and presentation skills, seek continuing education, exercise emotional intelligence, and become more self-motivated and proactive' [6]. Obviously, interaction in virtual

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environment, including educational, promote 'upgrading' of human cognitive abilities and require organizational acumen, emotional stamina, self-discipline and diligence [6], [10], [16].

Students and teaching staff of the linguist and non-linguist faculties of the MGIMO University and Russian University of Transport took part in 7 questionnaires which were especially elaborated to find out the attitude of students and teaching staff to on-line education, its challenges and opportunities. All in all 217 students and 25 members of the teaching staff (tutors, teachers and lecturers) participated in the research with the use of case-based reasoning system to analyze on-line collaboration between students, between students and teaching staff, between members of the teaching staff in digital learning and educational environment.

The first two questionnaires were aimed to assess students' abilities to adapt to new educational rules and learning environment. They were offered to the participants at the end of the 2019-2020 academic year, after a two-month period of learning and teaching in the conditions of lock-down.

The monitoring was implemented with the usage of the educational platforms developed at the universities. The questionnaires were organized in data tables. The participants were given 24 hours to fill in the form and provide their comments. It was vital to receive substantial answers to such questions as *why, what do you think, what can you suggest*, etc. The researchers were determined to assess psychological and emotional state of the respondents, their opinion and attitude towards new e-learning environment and in the end the *level of adaptability* to new forms of collaboration in virtual educational reality. Among the questions included in the questionnaires were the following: "*Do you prefer contact or virtual learning?; Do you support the introduction of new forms of distance learning and virtual collaboration under the COVID-19 pandemic?*; *Do you find it stressful to adapt to new e-learning environment?*; *Have you experienced any harmful impact on your health when working in e-learning environment?", etc.* The respondents were free to give their comments in a written form in corresponding columns of the table. The researchers collected the answers, counted and analyzed them. Thematic and statistics analysis was employed to examine the findings from the questionnaire

The third and fourth questionnaire estimated the attitude of educators to new challenges of the digital educational environment. The research has exposed the so-called "generation gap": most elderly professors have voted for traditional in-person collaboration, meanwhile there is a rather high percentage of "active" professors who have demonstrated eagerness and diligence in acquiring new skills of working in digital environment. Most educators confess that getting used to new tools and methods of digital education is just a matter of time.

The rest of the questionnaires testify that the overwhelming majority of interviewees observe that on-line collaboration serves the interests of protecting human health as well as corresponds to the qualification requirements modern employers seek and encourage in personnel. Nowadays employers quite often expect their staff to work in virtual teams, geographically dispersed. So students should be taught to work and learn digitally: to use the Internet resources effectively, to demonstrate acumen and self-discipline, to brush up their public speaking and presentation skills. Thus, on-line collaboration should pursue these goals.

3 RESULTS

3.1 Level of adaptability

The results of the two questionnaires proved that it was rather easy for most students to embrace changes in educational approaches and procedures. In some cases remote work with the use of IT technologies had been implemented long before the COVID-19 pandemic. The universities participating in the research had introduced mentorship and internship programmes, business incubator facilities with videoconferencing classes and supportive collaboration tools before the pandemic broke out. And those faculties that had elaborated and introduced IT innovations in their educational process beforehand find themselves more confident and independent in times of COVID-19 crisis. In general, 222 respondents (92%) showed a high level of adaptability of students, in particular. And it's worth mentioning that students and educators of all ages have demonstrated a high level of motivation for developing new skills for social interaction in the virtual environment: 210 students and 19 teachers.

The inquiry has demonstrated that the introduction of new forms of distance learning and virtual collaboration under the COVID-19 pandemic was the right measure to provide steadiness of educational process under the lock-down and social distancing conditions: ninety eight percent of

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educators and ninety nine percent of students pointed it out, stressing that this measure prevented further spread of COVID-19: telecommuting secured the lives of elderly educators with the age of 65+ (among the respondents this category amounts to thirty nine percent).

3.2 Popularity of on-line education

One quarter of educators (25%) noted that they had gained some experience of virtual education before the pandemic, and found it very useful under force-majeure conditions of lockdown during the pandemic.

The number of educators who is actively employing the tools of e-learning has greatly increased since last year: in 2019, before the pandemic broke out, only 25% of educators and 35% of students were in favor of distant-learning, whereas in 2020 these numbers have increased up to eighty seven percent and ninety percent respectively (Fig.1):

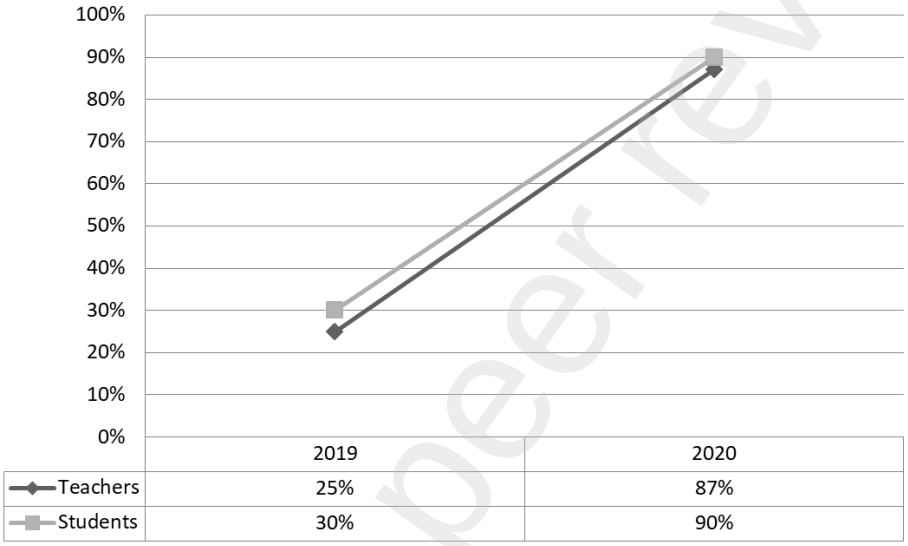


Figure 1: Dynamics of responses in favour of on-line education

The research has also proved an increase in digital 'literacy' of both educators and students. It presumes that educators have acquired new digital skills and have developed new forms of distance learning and virtual collaboration (almost 99,9 % of educators have agreed that their knowledge of IT and Internet resources has multiplied)

But a large number of respondents (nearly sixty percent) spoke for resuming contact work and reopening 'physical' classrooms after the pandemic. Meanwhile nearly seventy percent of respondents noted that there would be no total reverse movement to the 'old times'.

3.3 Benefits and setbacks of on-line education

The major part of the respondents among teachers (95%) noted that new forms of on-line collaboration required great cognitive and physical efforts which made the transition period rather stressful (almost 87% of the respondents pointed out the tension and stress they had to overcome in getting used to new forms of collaboration in e-learning environment). Practically all respondents (87%) mentioned changes in their behavior and character while working in e-learning environment: they highlighted that on-line education and collaboration has required psychological adaption and self-discipline. Three quarters of educators experienced some harmful impact on their health when working in e-learning environment (mainly worsening eyesight, blood pressure, lack of exercise, headache, degenerative spine disease), while students (99%) complained of lack of physical activities and social communication (Fig. 2):

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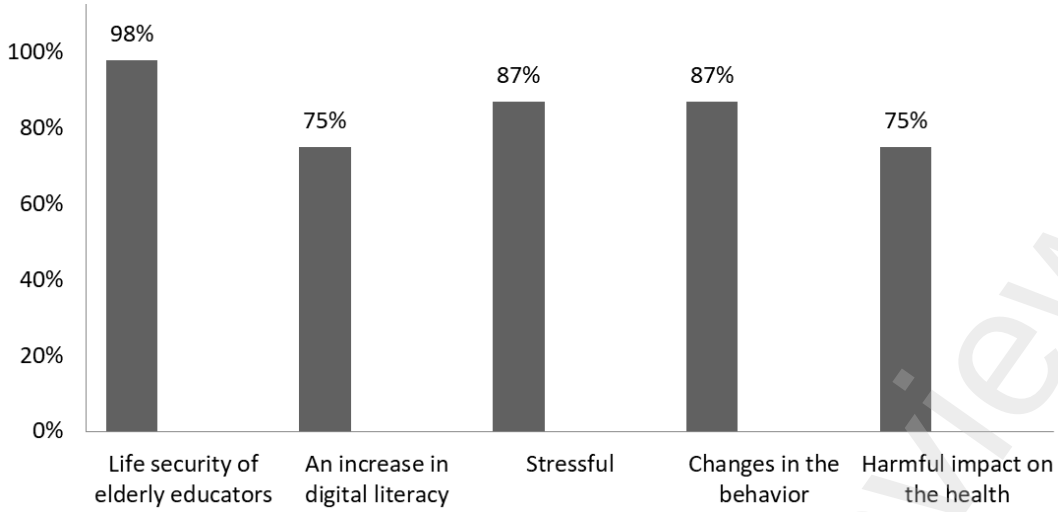


Figure 2: Benefits and setbacks of on-line education (Teachers' answers)

Besides, both students and teachers have acknowledged that on-line collaboration has promoted development of their cognitive abilities (information comprehension, procession, content structuring) and new skills of telecommuting, telecommunicating and telepresenting the results of their work. One third of educators noted that they need further upgrading of their digital knowledge, which testifies that new challenges of e-learning have boosted cognitive abilities of both educators and students. Moreover, it has become evident that on-line collaboration plays a great role in developing new skills of telecommuting which are in great demand in labor market nowadays.

4 CONCLUSIONS

World experts point out a very important aspect of virtual education: students and educators are gaining skills which are necessary for modern jobs as part of telecommuting 'virtual teams': members of such teams have 'to know how collaborate efficiently, conduct online research and analysis, use the Internet resources, master speaking and presentation skills [3]. Obviously, on-line collaboration should be addressed as a new form of verbal and non-verbal communication which requires a new level of cognitive abilities and psychological flexibility as well as organizational acumen, emotional stamina, self-discipline and diligence. And these aspects are of great scientific interest and MGIMO and MIIT scholars and educators are concentrating on further research in this field.

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