

Book of Abstracts



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Marta Cimitile and Riccardo Pecori

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Message of the General Chairs of HELMeTO 2021

Dear friends,

HELMeTO'21 is the second edition taking place in the worldwide COVID-19 pandemic. We miss again the face-to-face discussion, but the responsibility sense brings us to do our best to build a proper online environment to foster both the discussion in sessions and social relationships in the virtual coffee breaks.

As in the previous two editions, the third one puts the focus on the special features of the online education, searching new approaches that offer quality teaching-learning processes with their own characteristics. This workshop was born to share theories, methodologies and experiences for a more and more technological world, where education and, particularly, higher education, was taking an active part. Thus, the search for the best approaches to obtain good results in online learning, assessment and analysis was relevant. However, the current emergency has brought the whole educational community to the virtual environment, gaining an even more important relevance. We might all agree that educational-related needs arisen during the pandemic accelerated our attitude to learn, to participate, and to improve the e-learning scenario; and we might also agree that many of those solutions came to stay, since everyone had the opportunity to face, learn and take advantage of them.

In this context, HELMeTO'21 includes a special track where models adopted during the pandemic situation have emerged as new opportunities in regular scenarios. Moreover, reflections and practices about the meaning of digital skills in e-learning and continuous training, and the keys for the globalization of e-learning are studied in the corresponding special tracks. From the actors' viewpoints, one of the special tracks faces the students' perception of learning, teaching and assessment in online higher education, while another one presents the need of training for teachers in digital environments, recognizing the different features of e-learning. Finally, how disciplinary online teaching is being developed in the current higher education panorama is discussed in another special track.

As main tracks, as usual, this edition of HELMeTO includes a session for online pedagogies and learning methodologies as well as a session about learning technologies, data analytics and educational big data mining. Moreover, as a cross-track, the COVID-19 emergency in higher education is included, in order to give prominence to the solutions and innovations that the educational community gave and is giving to the current circumstances. The scientific program is enriched by three plenary speeches given by Prof. Cristobal Romero from the University of Cordoba (Spain), Prof. Anna Dipace and Dr. Maka Eradze from the University of Foggia (Italy) and Matthew Gray, Head of Product & Design - Productivity Engineering Transformation at ION Group.

The third edition of HELMeTO was a great success from a scientific point of view. We received 65 contributions from 13 countries. Despite the high quality of all the contributions, just the best 47 contributions were accepted for this book of abstracts.

Unfortunately, Professor Antonella Galanti (University of Pisa) and Professor Luigi Sarti (eCampus University and former researcher at the Institute for Educational Technologies of the CNR-Genoa) passed away last months. Antonella and Luigi were two dear colleagues and

friends who have dedicated their academic activity to methods and technologies for education. A remembrance event will be dedicated to them during the workshop.

We would like to express our thanks to the authors, the four keynote speakers, the members of the program/scientific committee, the publicity chairs, the publication chairs, the secretariat, and all the colleagues who supported us. We are grateful to the University of Pisa, the Department of Information Engineering of the same University, and the SIREM Society for their support in organizing the event. Finally, we thank ION Group for kindly sponsoring HELMeTO 2021.

September 9, 2021
Pisa

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Teaching Practicum Online During Pandemic: Challenges and Solutions

Natalya N. Kalatskaya¹[0000-0003-3076-723X], Roza A. Valceva²[0000-0002-8312-4054] and Lilia A. Latypova³[0000-0002-5566-1039]

^{1, 2, 3} Kazan federal university, Kazan, Russia

¹kalazkay@mail.ru, ²valceva@yandex.ru, ³malilalektya@yandex.ru

1 Introduction

At the beginning of 2020, the world society was faced with the coronavirus pandemic, which affected the educational process at the university. The Ministry of Science and Higher Education of the Russian Federation recommended the transition of universities to distance learning from March 16, 2020 due to restrictions of coronavirus lockdown. [1].

The transition of higher educational institutions to a remote mode has set a number of tasks for Russian universities aimed at finding effective tools and technologies for organizing and conducting the educational process. A particular difficulty was the organization of pedagogical practices of students - future educational psychologists in conditions of mass quarantine.

At the moment, many scientists and practitioners share their experience in organizing the learning process during the pandemic [2]. Flores & Swennen (2020) studied the COVID-19 pandemic effects on teacher education [3]. Timmermans & White (2021) present the experience of 9 teachers sharing challenges they encounter and solutions they have during COVID-19 [4]. There is a number of papers devoted to teacher education in times of COVID-19 in different countries (Ellis et al. (2020); Flores & Gago (2020); Gafurov et al. (2020); Kidd & Murray (2020). Nasri et al. (2020); Quezada et al. (2020); Zhang et al. (2020) [5; 6; 7; 8; 9; 10; 11]. Golovnev (2020) described the experience of organizing distance vocational education in a technical college in quarantine conditions [12]. Meanwhile only a few articles highlight the issues of organizing student practices in pandemic times. Rudakova (2020) reveals the specifics of the final certification and the organization of college students' practical training in the pandemic [13]. Silina-Yasinskaya (2020) describes the features, problems, and methodological solutions in organizing the future journalists' practice [14]. Fadeykina (2020) shares the experience of conducting industrial (pre-diploma) practice of students from secondary vocational education institutions in the conditions of COVID-19 [15].

This paper aims to provide a critical insight into teacher education in Russia during COVID-19 pandemic; to identify and highlight challenges and solutions of organizing the practice of student teachers during the pandemic lockdown (case of Kazan Federal University). The following research questions were posed: what organizational solutions need to be offered in order to transfer students to the remote format of conducting practice? What individual assignments can be offered to students with this

format of practice? How effective is this format of practice? What difficulties do teachers and students face in the course of distance practice format?

2 Materials and Methods

Research methods include analysis and synthesis of the regulatory, legislative, instructional and teaching papers and materials on management and procedure studies on teacher education during and after lockdown in Russia as well as study and generalisation of remote teaching experience. As an illustrative example we discuss the Kazan Federal University case of teacher education during pandemic and post-pandemic period. The main data sources are two questionnaires for teachers and students. The questionnaire for teachers contained questions aimed at studying the attitude to the remote format of the practice, the degree of workload of teachers, etc. The questionnaire for students contained questions in which they had to express their attitude to the remote format of the practice, share difficulties and positive moments they encountered during their practice, etc. 82 student teachers, as well as 23 academics of the Institute of Psychology and Education, Kazan Federal University answered the questions of the questionnaires. These teachers were participating in organizing the remote format of pedagogical practice during the lockdown. The followed qualitative analysis helped to get the answers to the research questions.

3 Practical training of student teachers in the context of Federal state standards of higher education

The practical training of future teachers is one of the most pressing problems in the system of teacher education. The Russian Federal State Educational Standard of Higher Education lays down the requirements for the content and organization of practice: it defines the tasks that must be solved by the student, as well as educational institutions where it is necessary to undergo practice. At the same time, the content of all types of practice, the specifics of their implementation, the form of reporting are determined by the programs of practices. In accordance with the provisions of the State Educational Standard on the types and tasks of practice, the content of the internship program is for the most part the prerogative of the faculty or institute of a the theoretical basis, internship programs in many Russian universities are not common, and each university develops their own programs.

4 Organizational solutions in transferring students to the remote format of conducting practice

In the course of the study, there were identified the key problems KFU teachers faced when switching to a remote mode of work. Firstly, no one had a large-scale experience of the simultaneous transition of students and teachers to the format of online communication. The main burden fell on the staff of universities to ensure the transfer of all work processes to a remote mode. This was especially difficult, since this transition did not take place at the beginning of the semester, but in the middle of it, which required restructuring the courses impromptu. Secondly, the university was

not ready for the remote communication format due to the lack of a single program designed for remote learning. The KFU management decided not to postpone the educational process, but to change its format. It was decided to introduce a new training format - in the form of distance learning on the Microsoft Teams platform. The specificity of training student teachers presupposes a close contact of student trainees with school students. The organization of practices in this situation caused the greatest difficulties, since the educational institutions where the students had their practice also had a lockdown. The coordination of the educational process between schools and universities was difficult to organize in conditions of uncertainty. Schoolchildren studied on the ZOOM platform, and KFU used the Microsoft Teams program. Thirdly, teachers and students lacked digital skills and knowledge of the use of ICTs in education. Therefore, the work was done in the emergency mode.

5 Results

Answering the third research question, we have revealed that only 39.1% consider the remote form a good alternative to the practice of students. As for the positive aspects of the remote format of practice, 60.9% of teachers noted the individual pace of knowledge assimilation. 56.5% of teachers noted the difficulty in ensuring the mastery of all competencies by a student during the period of practical training in a distance form.

Regarding the fourth research about the difficulties the students encountered while completing the practice remotely 33.9% of students did not experience any difficulties, 13.9% named technical problems (malfunction of a computer headset, poor internet, etc.), 3.9% complained about a long stay in front of the computer. For 17.9% of students, there was a lack of "live communication", both with teachers and with children, school psychologists and teachers. 14.2% of respondents believe that the remote format of the practice has affected the increase in workload. Among the positive aspects of the remote format of practice, 50% of students noted the rational distribution of working time.

In addition, interesting methodological solutions were developed in organizing the practice of students in a distance format, as well as a set of individual tasks, adapted to the new online format of the future educational psychologists' practice in the emergency mode.

6 Discussion and Conclusions

The crisis has once again confirmed that the potential of the teaching staff of the university plays a critical role. The most important lesson of the crisis is that the educational policy of educational institutions of higher education should have long-term action plans in case of situations in which they are forced to temporarily suspend their work in full-time. Distance format of practice does not ensure contact work with children, and it is also not possible to adopt pedagogical experience from specialists. Since the training of teachers requires the mastery of skills in conducting various forms of education and upbringing (for example, a lesson, a class hour, an extracurricular activity, a correctional and developmental lesson, etc.), then no alternative tasks (video recording, analysis of a video recording of a lesson, etc.) cannot fill this gap. The experience and data gained during the forced transition to

distance learning because of the pandemic should be used in developing an algorithm for the university's actions in emergency situations.

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