

The HSE LOOK

Digital University

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People are crazy and times are strange, I'm locked in tight, I'm out of range I used to care, but things have changed

— Bob Dylan

igher education is flooded with stirring reflections on whether the pandemic has brought about more challenges or opportunities for teaching and learning. It's a controversial debate, which leaves no university leader aside and the interviewee in this issue's main story – Vice Rector Sergey Roshchin – has strong views on it. We also explore how two tenure track academics – Dr Mikhail Popov and Dr Anatoly Kharkhurin – are sharing their perspectives on loss of live social communication and the prospects for its digital transformation. And traditionally at the beginning of the academic year we are delighted to introduce colleagues, who received their tenures this past September. The HSE Look talked to them about their previous experience and plans of engaging with the concept of digital university.

Yulia Grinkevich
Director for Internationalisation

Terra incognita no more

Dr Sergey Roshchin serves as Vice Rector with responsibilities in development and implementation of degree programmes, continuous education, and eLearning. He is Head of Laboratory for Labour Market Studies and Associate Professor at Faculty of Economic Sciences. Dr Roshchin shared his thoughts with The HSE Look on the way he sees the development of HSE as digital university.

HSE University's Development Programme for the period up until 2030 has a strong focus on the digitalisation of teaching and learning activities. To what extent are online formats already used at HSE University?

Over the past six years, HSE University has done a lot to develop various formats for online learning. On the one hand, our course offerings are significantly represented on Coursera and the National Open Education Platform; we are one of the leading Russian academic institutions in this area. We have also a large number of students and agreements with Russian universities that use our e-courses.

On the other hand, we have done quite a lot to integrate online courses, both our own and those created by our colleagues from other leading research and educational centres in the world, into our educational programmes. There are currently about 500 MOOCs available. However, the situation is not static and continues to develop thanks to the concept that's been given the provisional name of 'digital university'.

The development of modern digital technologies has helped to blur the boundaries between what we used to call offline and online learning. In fact, we are now reaching a point where everything we do offline is also accompanied by various digital tools.

How does this differ from the already familiar MOOC format?

What we used to call a MOOC is now only a part of how knowledge from teachers is transmitted in new education products. In addition to video, there are other materials – printed, visual and audio – useful for designing courses.

New opportunities for assessment tools are also appearing which can help students test their knowledge or confirm that they have achieved a certain level. In the future, this may be well associated with the creation of adaptive educational technologies, when, at a certain level of development, students will receive automated consultations on which sections of course curricula need to be further mastered or reviewed.

In addition to individual courses with online and offline elements, do you plan to implement fully online programmes?

If we look at Coursera as one of the most famous world platforms (with 65 million participants), we can see that, until recently, there were about 12 entirely online programmes. Now, there are 21 and this process is developing.

In February of this year, we successfully enrolled the first cohort for the Master's programme in Data Science in cooperation with Coursera (almost 100 students), and in August we enrolled a second cohort. The number of countries represented by the students has also expanded. So, the movement towards online education, with a view to those subject niches where it is appropriate and efficient, began long before the Covid pandemic. Next year, there will be more than 10 such programmes.

Does this mean that further digitalisation will replace live communication between teachers and students?

Such a statement is rather absurd. Live communication will remain, but firstly, it will exist in order for a dialogue to arise between the teacher and the student. From this point of view, digital educational products absorb routine elements that can be alienated and transferred from the teacher, while the student can work with this content independently.

Will digital products only be created for certain areas of study?

The transformation will affect all disciplines at HSE University. In this way, we would like to improve the quality of education and foster a wider range of choice for individual trajectories. In the near future, most of our teachers will be involved in the development of digital educational products. Education without digital technology has no future. This is a new part of the competences that are needed for university life, just as computer skills once became. Otherwise, it will be impossible to continue in this profession.

Will the creation of new digital education products be mandatory for each programme and to what extent?

At the moment, it is required to include the option for students to take a MOOC in each degree programme, both our own and those created by other universities. As for the development of new high-tech products, in the near future, the provisions of the 2030 Development Programme will be projected onto specific faculties and programmes. In this sense, there is still no 'executive order' that would say that every fourth or every second programme must do this. However, we are talking about the fact that, in the next three to four years, it will be necessary to get to a situation where the university as a whole will have such offerings for all of its programmes.

What will this mean for teachers?

All teachers are expected to digitise their educational routines. Specifically, this means using various approaches to testing knowledge, various games and simulators in order to transmit in digital format what we previously wrote in textbooks. It is impossible to insert all pictures, video and audio into a textbook, but now, there are much more opportunities. To use them for creating digital education products is a core task for both lecturers and programme leaders.

Does the University have plans to support teachers?

HSE University has already created a number of institutional tools. It has adopted various local regulations, which can stimulate the creation of high-quality MOOCs and new digital educational products. It has already created an infrastructure these are studios where you can be filmed, as well as a one-button studio where you can make self-recordings. In addition, 'factories' for simulators are being prepared.

We have the major objective of accumulating and disseminating experience in mastering new technologies. For instance, there are interesting projects in engineering and design. After the forced transition to the online format, we immediately organised a virtual school to provide instruction in the best teaching practices, while also trying to ensure that those teachers who did it in an interesting and quality way can share their experience with their colleagues. It is obvious that similar experiments in sharing experience will take place in the future. I think it would be impossible to say that there are those who know everything in terms of teaching in the digital world. We are all accumulating experience and this should be the subject of a separate activity.

What, at the moment, is the assembling point for accumulating of this experience?

Intuitively, this question reflects a dogmatic worldview: there is one point to which you need to 'bring experience', and then, at this point, the world will be a totally happy place. However, the world is more complex and, as such, these assembling points appear in various places. We are trying to build such an assembling point in the education department and digital department since many issues can be solved at the intersection of creating technological tools and its meaningful use. Plus,

since there is specificity in terms of subject space, and the fact that you can never underestimate the possibilities of self-organisation within the academic community, such points can be formed within faculties and subject-focused subdivisions.

Has the pandemic changed your perspective of the digital university concept?

This year (2020) has become an unusual one for education. The pandemic, which introduced many technical restrictions on teaching and learning, undoubtedly influenced our understanding of how to deliver education. The massive transfer of all teachers to an online format forced even those who wanted to postpone this necessity to think about edutech. And they did start thinking about them and began to use them in practice. The pandemic has helped to lift many of the mental barriers for those who previously viewed online teaching as terra incognita. Moreover, this affected everyone: teachers, researchers, students, administrators and university managers. From this perspective, the pandemic has been a catalyst for transitioning to new educational technologies.

We are still looking for a balance with the most effective combination of online and offline approaches, but the pandemic nevertheless has helped people realise that going online can remove many boundaries that once seemed unbreakable. It turned out that partners and colleagues who are located in different parts of the world do not have to come to the university in person.

They can take part in online conferences and lectures. Also, it turned out that it is possible to build a teaching system within the four HSE University regional campuses, providing all students with the opportunity to take part in courses taught on any of them (we have over 1,000 of such courses). To do this, we synchronised the class timetable, which, taking into account the time zones, did not always coincide. Moreover, it turned out that where it seemed that only offline laboratories

were possible, in particular, in biology, quite adequate virtual instruments were created. So, there are no definitive answers on how we can better form certain competences online, but the speed of development in this area has accelerated dramatically. I think it will take another three to four years for the academic community to truly find the right balance.

What are the main challenges that we need to overcome in order to become a truly digital university?

I think there are three main challenges. The first challenge is to stop transferring offline knowledge that can be broadcast online. It is necessary to get used to the fact that in the past we used to write textbooks and give them to students as a reading, but now we can present many elements of information online. Communication with students has become focused on problem-based learning, and this is something that is not routine and is, instead, associated with a teacher's unique qualities as both a researcher and an expert.

The second is understanding that interactions with students and listeners take place not only here and now, within the walls of the university. They are happening outside the boundaries of time and space. Both 100% online and joint programmes, which we are now actively developing with other Russian universities, imply interaction with 'virtual' students. However, it will take some time to get used to the idea that there are no boundaries anymore. The third challenge is that this is an opportunity to attain fundamentally new level in terms of variety and individualisation of students' academic trajectories, e.g., in terms of adaptive educational tools and the opportunities offered by various new services. Like in my favourite story 'Garden of Forking Paths' by Jorge Luis Borges, we are currently facing a similar situation, since it is easy to combine elements from different programmes. The teaching community must learn how to do this effectively.

Intercultural awareness through the looking glass

Dr Anatoly Kharkhurin *joined HSE University in 2019* as an Associate Professor at the Faculty of Social Sciences.

He received his PhD in Experimental Psychology from the City University of New York and taught in the United States and the United Arab Emirates.

This academic year he is teaching Psychology of Thinking and Reasoning and Psycholinguistics.

You have taught over ten different courses over the last decade. Which of them was the most 'digitalised'?

I have never done online teaching before. In the States and the Emirates, everything was done the old-fashioned way. This year is the first time I am lecturing in a blended format and everything will most likely be transferred online.

What are you planning to do in the upcoming year in terms of 'digitalising' your teaching activities at HSE University?

Digitalisation enables access to audiences from all over the world, an opportunity we have never had before. Nevertheless, when we were asked what format we would prefer, I voted for 'live'. This is because live communication gives the kind of synergy that Zoom just cannot provide. In the classroom, a charismatic figure of a teacher inspires students, energises them to become curious and thirsty for learning, and they reciprocate giving the energy back. I have had this experience quite often - when you are lecturing for 1.5 hours in front of the audience of 100+ people and, when you finish, on the one hand, you are tired, but on the other hand, you have so much energy and feel ready to go on. I doubt that this would happen online.

How can you compensate for the loss of this energy?

I don't know yet. We need to come up with new methods and techniques to make the students vibrate.

You often argue that multicultural experience facilitates creative thinking. And what about those who don't have a chance to study abroad? Will digitalisation help?

First of all, I want to make clear that I don't see digitalisation as panacea for all problems. Digital tools are just tools, an additional means of solving problems. Digitalisation can help in the creative process, but it's just like any other tool. Traditional artists for example have paints at their disposal, they can use them to implement their ideas. Contemporary artists employ digital tools like the VR. In both cases, one can produce a piece of art or piece of ... not art, and the media would not compensate for the lack of creative capacity. The same with development of creative potential: it can be successfully achieved in both old-fashioned way and using cutting edge technology. I don't really see any fundamental difference.

Coming back to your question, second language acquisition literature makes a clear distinction between learning in natural environment and in the classroom setting. Immersion is important not only for language learning, but also for developing intercultural competences. My research shows that both factors facilitate development of creative potential. Inability to directly acquire multilingual and multicultural experiences can be compensated by consciously restructuring the educational process. And that's exactly why we have just recently launched the educational project Plurilingual Intercultural Creative Keys (pick.hse.ru), which was supported by HSE University's Faculty of Social Sciences. Since I joined the HSE only a year ago, this is an important sign for me personally and for my team. By the way, I am very proud of my team, which I managed to assemble

despite the pandemic. It consists of ten highly motivated individuals: two HSE faculty, several psychology and education Master's and PhD students, an expert in educational law, and an English teacher from the Gazprom School.

The major goal of the PICK programme is to construct a unified teaching model, which harmoniously and systematically develops important competences: linguistic, intercultural, and creative. These competences encourage the development of a socially and professionally integrated person. This in turn, would contribute to students' systemic adaptation to the contemporary world. Without the expectation that people will study or live abroad, within their home environment, we give them enough ground to develop these competences. After completing special PICK training, teachers who could have limited international experience themselves would be equipped with educational tools allowing them to nurture linguistic and intercultural competences as well as creative potential of the students. Then, all doors will open thanks to the opportunities provided by the virtual world.

We plan to build a free internet platform for teachers' and students' international exchange, which will be available through the school subscription to the PICK programme. This app will integrate in the educational process communication with students from other countries. Just imagine that you have a school in Cherepovets (I am having a conversation with their representatives in an hour), which is involved in the PICK network. And we have schools in let's say Germany or the Netherlands involved in this network. Communication within this network alone would provide students with international experience.

During the pandemic, international communication by means of internet technologies became as salient as never before. Today, you can gain intercultural experience in social networks or in multiple Zoom presentations. How long does the average high school student spend on Instagram? If just a fraction of this time is spent chatting with new friends from the PICK network, a student can gain quite extensive intercultural exposure. Yes, it's not the same as living in the country itself, going to the supermarket, buying a baguette in the morning after jogging in the Luxembourg Gardens. Nevertheless, we will be able to give them a good foundation, so that they can further develop intercultural competences.

And to what extent does the teacher intervene in facilitating this process?

One of the main goals of the PICK programme is the transformation of teachers' perception of the teaching and learning process. We are talking about enthusiasts; we cannot force teachers to adopt a new mentality.

We expect that 'PICK teachers' will do their job in a qualitatively new manner, which would emphasise development of soft competences in their students. However, I would be cautious with giving teachers a full control over this process. After all, they remain authority figure, at least in the eyes of the students. Teachers would need to make a huge effort to change this, often righteous perception.

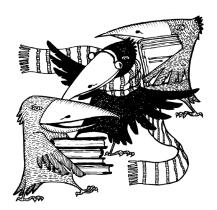
On a different note, I'd like to mention that our programme emphasises an ability to consider the same phenomenon from different perspectives. A classic example is World War II and different views Russians, Americans or Germans have on that historical event.

When I lived in the Netherlands, I had a friend who, at some point, revealed to me that his grandfather served in the SS, and I did not know how to take this. My grandfather also fought that war, but on the opposite side. During my graduate studies in New York City, I worked in the lab in Brooklyn College, which is located between a largely African American neighbourhood

and the Jewish Orthodox quarter. All my friends and colleagues were Jewish.

Then, I ended up in an Arab country and those whom we called terrorists turned out to be 'shahids' in the eyes of my new students. Again, at first, it was a shock. However, after living there for many years I realised what an important experience I had gained.

Any situation can have several perspectives and they can also be completely opposite. An ability to comprehend the multiplicity of people's perceptions largely contributes to tolerance of ambiguity, a skill which becomes virtually paramount in contemporary reality when we don't know what would happen tomorrow. And this is one of the key skills that we want to help our students develop.



Experiments with re-imagining social networking

Dr Mikhail Panov joined St. Petersburg campus of HSE University in 2019 as an Associate Professor at the School of Economics and Management. He received his PhD in Business Administration from Stanford University and taught Economics at New York University. This semester he is teaching Theory of Finance.

Is there a sense that students in New York are more motivated than those you work with today?

It doesn't seem so. I have spent a year here and four at New York University. At the undergraduate level, I like the students in Russia more. You feel that they are sincerely striving for knowledge. Students in New York have a slightly more consumerist attitude, with the exception of students from China. After each course, we had an anonymous evaluation and what they liked or disliked allows me to say that they wanted more edutainment.

Economics and finance are at the core of your teaching. How does digitalisation help students develop an understanding of these particular subjects?

I have taught more offline, and only at the start of the pandemic did I begin to teach online. Face-to-face is more convenient for me because there is live contact with students. After the lecture,

they can come up and ask questions. They do it much more actively than via Zoom or by e-mail. My colleagues abroad usually record lectures in advance, post them, and then later meet via Zoom in a Q&A format. This scheme is convenient for professors in that they can record lectures in one go and use them throughout the year.

An additional plus is that the quality of lectures can be better monitored. You can rewrite it several times without being distracted by extraneous things. Delivering a lecture in a single piece is more difficult to do.

At the same time, all of my courses are quite mathematical and it is more effective to demonstrate such things when there is a presentation on one side, and you can write down a proof in a live format on the other side. When one needs to correctly and clearly formulate and follow a chain of evidence, sometimes it is very important that students are in the classroom and can ask questions directly. If they pose questions at the moment when the evidence is being explained, there is better chance of them effectively assimilating this information. In some form, this can be repeated online, but for my courses, digitalisation does not provide many new opportunities.

Online contact is now replacing live communication. Can this effect be mitigated?

It seems to me that there is no way of doing this. Although there is an assumption that, when student are in the classroom, they are more focused, less distracted, and can listen to a lecture from start to finish. If they are staring at their computer at home, then pauses to drink tea, and then not be motivated enough to watch the whole thing. The disciplinary effect, especially for younger students, can be much greater. Furthermore, after the lecture, they can communicate with each other. There is nothing wrong with recording a lecture, but communication over a computer, in my view, is not biologically embedded in us. Live and direct communication reveals more, including through one's body language.

Do you consider this a challenge, for which a solution needs to be found?

It seems to me that after completing an undergraduate degree, if you want to take an online course, it really shouldn't be a problem. However, if you provide slides and lecture notes without faceto-face communication right after high school, the result might be not as effective. Let me tell you about my own experience. I pursued the New Economic School Master's from 2008 to 2010. Especially at that time, NES was detached from online education as much as possible. As students, we practically lived there. There were lectures and a lot of homework. We studied and did work inside the school. We went to the reading room and had discussions which was very productive for me. Often, we came in at 9 am and left at 10 pm. You could understand course materials on a deeper level through discussions with five smart fellow students after lecture, and this was also useful for developing future career connections. If I had gone online then, I would not have made it to graduate school and that would have been a great loss.

A decade has passed since then. How did this social component influence you?

Overall, everything that I have learned in my life, I received on a one-to-one level. At school, I had a good math coach and I often participated in math competitions. There was very close communication. I studied at the Faculty of Mechanics and Mathematics of Moscow State University, and there I networked a lot with fellow students. At Stanford, I learned enormously from one-to-one conversations with my supervisor.

You plan a meeting for an hour and it can last for four. There, the most useful course for me was that I would find it impossible to repeat online. And there were only five people enrolled. The professor gave a list of 30-40 tasks for the entire module, which were not clearly formulated. Most of my assignments were to articulate what the actual task is. You get to solve each one for several weeks. At certain times, we analysed this or that assignment – in a very lively and active way. I can't imagine how we would have done this online.

Many research seminars are now held online and I'm afraid little feedback gets back to the speaker.

There are things that you want to say in person and you will not say this to the whole audience; you want to say this on a one-on-one basis. In addition, such things can be more valuable than what is said to the entire audience.

Or, you can continue further at the dinner and better explain what you mean. Why not write an e-mail? It seems that something on the psychological level is not happening for some reason. Less trust, perhaps.

Has the pandemic changed your position on digitalisation?

No, but it created new opportunities to conduct natural experiment, a mandatory one but entirely necessary.

Welcome aboard

In September 2020, nine professors in mathematics, linguistics, media, economics, sociology, psychology, and computer sciences received their tenure positions at HSE University. We congratulated them and asked them about their previous experience and plans of engaging with the concept of digital university. They also shared with us their views on the challenges HSE University will have to face in its path towards becoming a digital university.

Yiannis Mylonas (Faculty of Communications, Media, and Design)

Dr Mylonas has been employed by HSE University's School of Media since 2014. He holds a PhD from the University of Copenhagen and has also worked as a postdoctoral researcher and a lecturer at the University of Lund. His fields of specialization

are media sociology and cultural studies. His monograph, "The 'Greek crisis' in Europe: race, class and politics" was published in 2019 by Brill (Leiden). His current research interests are concerned with the study of media practices and cultures today,

under the lens of the theoretical accounts of the public sphere. This semester he is teaching Critical Text Analysis, and Media, Culture, and Critique.

'The pandemic and the safety measures may determine the teaching format for this academic year at least, but I believe that face-to-face teaching in the classroom is indispensable for education. As far as my own teaching is concerned, my intention would be (if the HSE rules and the general conditions allow) to have the teaching done offline, in the classroom, and then have the readings and lecture support materials uploaded to the University's online resources for my course participants. Given the traveling restrictions applied for the containing of the Covid-19, platforms like Zoom and Microsoft Teams enable the relatively easy booking and hosting of foreign lecturers, something that is generally more complicated when the physical presence of the guest lecturer is required.

In my view, coming from a Humanities and Social Sciences background, one of the future challenges would be to maintain a healthy balance between the offline and online education process. The qualities of offline instruction and direct teaching in the classroom cannot be substituted by the digitalisation of education. At the same time, the process of digitalisation offers amazing resource potentials to students and educators alike that need to be utilized at the utmost. The use of digital resources for education may vary on the sphere of knowledge and the subject taught; in that sense, the educators need to judge accordingly.'

Eren Arbatlı (Faculty of Economic Sciences)

Dr Arbatlı has been a faculty member at HSE University since 2012. He holds a PhD in Economics from Brown University. His research area spans long-run comparative development, political economy of weakly institutionalised regimes and the economic history of the Ottoman Empire. Dr Arbatlı has taught several courses at HSE University, including Advanced Macroeconomics, Political Economy and Long-run Development. He is a co-organizer of the HSE International Seminar Series in Economics and serves in the international hiring committee at the Faculty of Economic Sciences. He is married to Ekim Arbatlı, also a faculty member at HSE.

'Given the COVID-19 situation, this year, like many of my colleagues, I will be teaching my courses online. While this is far from ideal, looking at it from the bright side, this is an opportunity for all faculty members to acquire the skills and experience that will complement HSE's other efforts to become a digital university.

I am particularly keen on experimenting with those digital teaching tools that not only offer a substitute to face-to-face teaching, but also can help student learning in new ways. For example, I plan to introduce more interactive elements to my online courses. One idea is using mini polls during my lectures to gauge student learning and collect immediate feedback. Another idea is using breakout rooms to split students into smaller groups to facilitate group discussions and collaborative work. For my Advanced Macro course, I'd also like to make use of virtual whiteboard to make real time graphical illustrations of certain economic concepts and mechanisms.'

Christian Fröhlich (Faculty of Social Sciences)

Dr Fröhlich has been with HSE University since 2014, first, as Research Associate at the Centre for the Study of Civil Society and the Third Sector, and then, as Assistant Professor in Sociology. Since 2016, he has been lecturing at the School of Sociology, providing instruction in sociology and urban studies. He is also Academic Director of the International Master's Programme in Comparative Social Research. Dr Fröhlich holds a MA and PhD in Sociology from the University of Leipzig (Germany).

He was also Research Associate and Postdoc Researcher at Södertörn University (Sweden), Visiting Fellow at École des hautes études en sciences socials (France) and the Lithuanian Social Research Centre. This semester, he is teaching Civil Society in Contemporary Russia, and Contemporary Sociological Theory.

'We should not forget about the non-digital space of our institution! With the currently available technologies, it is not a problem to build a digital university as a structure. But it is a problem to actually keep the same high level of quality, social experience and peer-to-peer learning as in offline education.

The challenge will be to combine the structure of a digital university with real life, so that it convinces students and lecturers that they have an investment in it. Lecturers have to 'go to school' again. We need education and training in using these new technical instruments and in building meaningful digital curricula.'

Marie Arsalidou (Faculty of Social Sciences)

Dr Arsalidou received her MA and PhD in Psychology (developmental and cognitive processes) from York University (Toronto, Canada). Her research interests comprise cognitive development and neuroimaging. She joined HSE in 2014 and is currently the head of the Laboratory for the Neurobiological Foundation of Cognitive Development (Neuropsy Lab). She is teaching Cognitive Developmental Assessment for undergraduate students and a Research Seminar in Cognitive Science for Master's students.

I think it is wonderful for students to have options to participate in classes remotely, in-person, or a combination of the two. However, we need to learn to evaluate student performance and course outcomes so that we can say conclusively what the best learning venues are. It would be good to see a user-friendly platform for creating exams for students that they could complete at home.

Our lab has several ongoing investigations to better understand neurocognitive abilities in children. We use methods such as eyetracking, ultrasound and magnetic resonance imaging. Because of the pandemic we have transferred our cognitive games to an online format so that children can participate in our studies and play these cognitive games from home. Parents can register at the Neuropsy Lab website. We truly appreciate the time children contribute to help us with our science and we actively discuss our findings with interested educators, parents and children.'

Mauro Mariani (Faculty of Mathematics)

Dr Mariani is a Physics graduate and received a PhD in Mathematics at La Sapienza (Rome). One year of his PhD was spent at New York University. He then pursued his postdoc in Paris and secured his first tenure in 2009 in Aix-Marseille. After spending a few years back in Italy, he arrived at HSE University in 2017. His main interests are calculus of variations and random dynamics, both from a purely mathematical and applied points perspectives. This semester he is teaching Probability Theory.

'There is a lot of excellent material online, produced by universities around the world. So, it is pointless to include low quality material on a given subject. To stay relevant, we must provide students with the opportunities and support that they cannot find online. This means interaction not just with teachers and professionals of a given subject, but also with other students. We must give them a taste of the academic atmosphere and instill enthusiasm.'

Natalia Slioussar (Faculty of Humanities)

Dr Slioussar started her academic path at the Department of General Linguistics at Saint-Petersburg State University. Then, a year at the University of Maryland as a visiting student helped her refine her choice – formal and experimental linguistics. As a participant in the Utrecht–Saint-Petersburg joint PhD programme, she was able to benefit from working both in the Netherlands and Russia. After two postdoc projects at University College London and Utrecht University, she started working at HSE University's School of Linguistics (2014). She is a winner of the Golden HSE award for research. This semester she is teaching Experimental Studies of the Grammar.

'I took part in creating two Coursera courses on psycholinguistics and neurolinguistics with my colleagues from Saint-Petersburg State University, but I always saw this as a separate genre. Needless to say, such courses significantly widen your options, but nothing can be compared to having live discussions in class. Being a researcher is about considering different viewpoints, evaluating information critically and trying to ask new questions – these things are difficult to teach if the whole course consists of prerecorded lectures and mechanistic tests. This year, I will need to introduce some blended learning techniques, but I would also like to go back to the good old days once the pandemic is over. This does not mean that I do not appreciate MOOCs. I see them and regular courses as two complementary things, which should be shaken, not stirred. MOOCs may be great for getting acquainted with different subject fields and mastering specific skills. Moreover, students entering postgraduate programmes come from different backgrounds, and very often, MOOCs can be instrumental in bridging such gaps.'

Christopher Brav (Faculty of Mathematics)

Dr Brav received his Master's and PhD in Mathematics at Queen's University (Canada). He then did postdoctoral research at University of Toronto, Leibniz Universität Hannover, and the

University of Oxford. At HSE University since September 2014, he has taught Introduction to Galois Theory, and Introduction to the Theory of Categories and Homological Algebra.

'I helped one colleague to prepare materials for a course on Coursera last year, and this year I would consider setting up my own course on this platform. As for the response to challenges we will face, some economists argue that higher education is, for most people, largely about signaling intelligence and conscientiousness to future employers. It's unclear whether a digitised university education can have the same value as a signal, thus making this type of education less desirable to students.'

Matteo Feurra (Faculty of Social Sciences)

Dr Feurra received his PhD in Psychology and Cognitive Sciences at the University of Florence. He was visiting PhD student at the Institute of Cognitive Neuroscience of University College of London and a postdoctoral fellowship at the University of Siena. His research interests span various areas of cognitive neuroscience, with a special focus on the sensorimotor system, memory processes, and non-invasive brain stimulation techniques. He joined HSE University in 2014 and currently leads the Memory and Motor Control group at HSE University's Centre for Cognition & Decision Making. He teaches Cognitive Neuroscience, and Advanced Neuroimaging Techniques.

'This upcoming year, I will be transforming my Cognitive Neuroscience course into full digital format. So far, students have had access to video, lectures and online materials, which are all shared using a G-drive. However, my plan is to have the course entirely digitalised. I am also teaching Advanced Neuroimaging Techniques, which is a course that is based on hands-on sessions with real lab equipment. That would be more difficult to digitalise. However, I am looking at several solutions.'

Quentin Paris (Faculty of Computer Science)

Dr Paris has been at HSE University since September 2014. He obtained a PhD in Statistics in 2013 from the Ecole Normale Superieure de Cachan, Antenne de Bretagne (now called Ecole Normale Superieure de Rennes) in France. From 2013 to 2014, he was a postdoctoral fellow at the CREST (Center for Research in Economics and Statistics) Laboratory in Paris. He is teaching High-dimensional Statistical Methods, Modern Methods of Data Analysis, and Modern Methods of Decision Making.

'I guess there are several challenges when building a digital university. For instance, I think that it is difficult for students to follow online classes without real interactions with other students or teachers. We definitely need to be creative when it comes to developing online materials to make sure that learning processes remain enjoyable for everyone and compensate for live class experience. On the other hand, the online mode has some very positive sides. For instance, recorded lectures (that can be paused, replayed, or viewed when convenient) can be a real game changer for students.'

