

OSSERVATORIO

LIS education during the pandemic: the experience of the LIS Department, St. Petersburg State University of Culture, Russia

Anna Gruzova

Introduction

The pandemic situation brought shocking health issues and death all over the world, the lockdowns and anxiety problems, the financial crisis and unemployment and so forth and it turned ordinary life upside down. Universities had to shift to online 'digital learning' (DL), and do it fast what was called 'quickstart'¹, 'education in emergency'², and even 'digital revolution'³. Terms 'revolution' and 'emergency' point to the devastating situation but also to the big push that universities got on their way toward digital education and innovations. The main problems were brought about by 'the remote mode of learning'⁴ and all universities have shared them one way or another. Among them were technical (accessibility, affordability, flexibility), organizational (educational policy, organizational forms of teaching), communicational (staying in touch virtually, organizing explicit two-way communication about expectations including communication in student groups, using social media and messengers) and teaching (learning pedagogy, teaching methods, principles and aids, didactic techniques that had to be

ANNA GRUZOVA, Department of Library and Information Science, St. Petersburg State University of Culture, Russia, e-mail gruzova26@gmail.com.

Last website consultation: October 28, 2021.

1 Johann Frederick A. Cabbab, *Quickstart in LIS classrooms: media materials, technology, and the pandemic*, «Philippine journal of librarianship and information studies», 40 (2020), n. 1, p. 29-40, <<https://phjlis.org/index.php/phjlis/article/view/44>>.

2 Sumitra Pokhrel; Roshan Chhetri, *A literature review on impact of Covid-19 pandemic on teaching and learning*, «Higher education for the future», 8 (2021), n. 1, p. 133-141, DOI: 10.1177/2347631120983481.

3 Wadim Strielkowski, *Covid-19 pandemic and the digital revolution in academia and higher education*, «Preprints.org», 2020, art. 2020040290, DOI: 10.20944/preprints202004.0290.v1.

4 J.F.A. Cabbab, *Quickstart in LIS classrooms* cit.



adopted to DL)⁵. These issues were considered so crucial that a new Digital Education Action Plan 2021-2027⁶ was designed by the European Commission «to overcome challenges associated with delivering digital education» and to provide «world-class, inclusive and accessible education to be available digitally to students across Europe»⁷.

Considering the 'Covid-19 lessons' for higher education, different universities developed frameworks and techniques of organizing DL 'in emergency'⁸. So did the LIS Department of St. Petersburg State University of Culture in Russia. This paper is focusing on challenges that the Department faced and on opportunities for higher LIS education and includes a detailed overview of the digital learning experience and strategies of the Department during the pandemic.

A review of continuing LIS education system in the St. Petersburg State University of Culture

St. Petersburg State University of Culture was founded in 1918 as the first Library University in Russia. The University includes the LIS Department among the 5 Departments (Arts, Music, World Culture, Social Technologies) and 3 Educational Centers (Continuing Education and Retraining of Culture Staff, Modern Musical Industry, Children Art School)⁹. LIS Department has educational programs at all levels:

1. Bachelor's level: 4 years of study, 240 credits.
2. Master's level: 2 years study, 120 credits.
3. Ph.D. level (doctorate): 3 years study, 60 credits. There is a Scientific Board considering research for granting scientific degrees of Candidate of Science degree (similar to Ph.D.) - 'junior doctorate', and Doctor of Science degree - 'higher doctorate'.
4. Continuing education and retraining programs for libraries staff – from the short ones (1-2 credits) till the one-year retraining (10-12 credits).

In total, the Department has about 500 students of all studying forms on levels (1-3) and many more every year on level 4¹⁰.

5 Martina Pavlíková [et al.], *How to keep university active during Covid-19 pandemic: experience from Slovakia*, «Sustainability», 13 (2021), n. 18, art. 10350, DOI: 10.3390/su131810350; S. Pokhrel; R. Chhetri, *A literature review on impact of Covid-19 pandemic on teaching and learning* cit.; John Sandars [et al.], *Twelve tips for rapidly migrating to online learning during the Covid-19 pandemic* [version 1], «MedEdPublish», 9 (2020), art. 82, DOI: 10.15694/mep.2020.000082.1.

6 See <https://ec.europa.eu/education/education-in-the-eu/digital-education-action-plan_en>.

7 Lucy Annette, *A digital learning future*, «Impact», 2021, n. 3, p. 4-5, DOI: 10.21820/23987073.2021.3.4.

8 J.F.A. Cabbab, *Quickstart in LIS classrooms* cit.; M. Pavlíková [et al.], *How to keep university active during Covid-19 pandemic* cit.; S. Pokhrel; R. Chhetri, *A literature review on impact of Covid-19 pandemic on teaching and learning* cit.; Ghulam M. Rafique [et al.], *Readiness for online learning during Covid-19 pandemic: a survey of Pakistani LIS students*, «The Journal of academic librarianship», 47 (2021), n. 3, art. 102346, DOI: 10.1016/j.acalib.2021.102346; J. Sandars [et al.], *Twelve tips for rapidly migrating to online learning during the Covid-19 pandemic* cit.; Sana Aslam; Sharad K. Sonkar; Valentine J. Owan, *Changes in teaching and learning in higher education during Covid-19 lockdown: a study of LIS students in India*, «Library philosophy and practice (e-journal)», 2021, art. 5223, <<https://digitalcommons.unl.edu/libphilprac/5223>>.

9 <<https://spbgik.ru/education/faculties>>.

10 Valentina Brezhneva [et al.], *LIS education at the St. Petersburg State University of Culture: trends and traditions*. In: *The future of education in information science: proceedings from FEIS - International EINFOSE Symposium, 10-11 September 2018 Pisa, Italy*, edited by Tatjana Aparac-Jelušić, Vittore

Level 4 is only offered as digital education and has been like that even before the pandemic. For that, we had a Russian learning management system (LMS) Mirapolis that was quite similar to the LMS Moodle but as we see further it hasn't been quite good for digital learning purposes in the levels 1-3.

On level 4 the Department participates in the Federal Project Creative People – a part of the bigger National Project Culture (2019-2024) run by the Ministry of Culture of Russian Federation¹¹ – that provides advanced training of 40,000 specialists annually including staff of the libraries. LIS Department of St. Petersburg State University of Culture has several programs in the Project to train and retrain the personnel of different types of libraries, and LIS teachers¹². Each program is 1 credit (36 hours).

Digital learning (DL) before the pandemic

At the start of the pandemic, we weren't prepared for what is to come although we've already had a lot of experience with DL. We started DL back in 2014 and from the beginning were fascinated by the DL opportunities for a democratization of education and by the perspectives to teach much more students than ever. The first LMS we had was the Sakai and with it we took our first steps to DL and developed the methodology of implementing DL in LIS education¹³. Also, we started to design the DL environment (DLE) and create open educational resources (OERs) to fill it with. In that process, we found out that the Sakai doesn't exactly fit the requirements of the DL environment being comfortable and as it was the main goal we got another system – the more modern Mirapolis that was mentioned earlier. Unfortunately, for some organizational reasons, we couldn't get Moodle from the beginning. So, we worked with Mirapolis for 5 years and at this time developed and taught several continuing education courses for working librarians and a 1-year retraining program for those librarians who haven't got a degree in LIS. Those courses and the program were fully online. At the end of the retraining program, we got a defense of student theses in the virtual room. The certificates were sent to the graduates by post. The program included 12 smaller courses and each of them could be studied separately with the certificate only for that course (puzzle-like-model). Among the courses were librarianship, library technologies and collections, library services, library management and marketing, project management, and so on. Assessment of student progress was carried out by tests, drills and creative tasks – and they were the most difficult to

Casarosa, Elena Macevičiūtė. Osijek: University of Osijek, 2018, p. 16-25, <<https://bit.ly/3ChRIR6>>; Valentina Brezhneva; M. Kolesnikova; D. Elyashevich, *Profile LIS bachelor degree training in Saint Petersburg State University of Culture*, «Trudy SPbGIK (St. Petersburg State University of Culture proceedings)», 205 (2015), p. 24-31 (text in Russian); Valentina Brezhneva; L. Soloveva, *An overview of libraries and profession in Russia*. In: *LIS Career at the Crossroads: Challenges and Opportunities: digest of articles*, edited by Parikshit Mondal. Calcutta: Department of Library and Information Science University of Calcutta, 2015, p. 281-287.

11 <<https://culture.gov.ru/about/national-project/about-project>>.

12 Irina S. Pilko, *Adaptation of distance learning didactics to the needs of library-information sphere*. In: *Informatization of education and electronic learning methods: digital technologies in education: proceedings of the IV International Scientific Conference, 6-9 October 2020, Russia, Krasnoyarsk*. Krasnoyarsk: Siberian Federal University, 2020, vol. 1, p. 431-435, <<https://elibrary.ru/item.asp?id=44018799>>.

13 Anna Gruzova, *E-learning technologies in LIS education*, «Trudy SPbGIK (St. Petersburg State University of Culture proceedings)», 205 (2015), p. 131-140 (text in Russian).

develop. About 20 students have finished the program (as usual for DL more have started than graduated) and the feedback from graduates was very inspiring. Along with fully digital courses, we implemented some parts of DL in our regular full-day and distant education so that some disciplines for undergraduate and postgraduate students went to be blended – like adding homework and passing tests in the system. Here, I should mention that only a tiny number of classes used that and not all teachers learnt how to use the DL.

Student projects, research, practice and events

As it was indicated above, the learning process is aimed to develop diverse competencies and skills of the students. To do so we use some didactic principles for soft skills and offer a various number of activities in and outside classes to the students. We consider that the main librarian's soft skills are motivation to research and critical thinking, communicative competence, information and academic literacy, teamwork, language competence, especially in English. They are embedded to the learning of the curricula disciplines – many of them need teamwork during research and/or project activity which in turn need communicative competence and so on. This is especially relevant for students' research and projects during the practice in the libraries, preparing course works and theses. Library practice is an important part of education and students have it every year in public, academic and other libraries. Libraries involve students in different activities and encourage them to conduct research and develop projects in the fields the library is interested in. In the fourth year, students write a thesis that included their findings and experience during 1-3 years course works and practices.

But also, for students who want more there are opportunities and events to go further:

- Student scientific community (SSC) brings together students from all years of study – from the first. Students pick the LIS topic they are interested in and conduct information research supervised by one of the professors and sometimes collaborate with the students from different years of study. The results are discussed at the monthly SSC meetings and usually counted as the coursework or different mandatory works. Students whose findings are relevant make reports on conferences in the University or others. Also, they publish papers in our student journal and/or conferences' proceedings.
- Student Annual International Conference that took place in the University for more than 60 years (it became international about 10 years ago when students from abroad universities and foreign students of the Department started joining). The main goal of the conference is to find, motivate and support talented young researchers. Department's section is called "Youth in LIS"¹⁴.
- Annual International Conference Continuing Library and Information Education that has been held for 16 years, and there is no analog in Russia. At the Conference, the issues of LIS education are discussed by the professional community¹⁵. When there are some student contributions to the topic, they report them on the student

¹⁴ Anna Gruzova, *64th Annual International scientific LIS conference of students and graduate students of Library and Information Science Department, St. Petersburg State University of Culture (SPbGIK) (Russian Federation), April 16-17, 2015*, «The SET Bulletin: IFLA Education and Training Section», 16 (2015), n. 2, p. 11, <https://cdn.ifla.org/wp-content/uploads/files/assets/set/Bulletin/updated_2015_no._2_july_issue_set_bulletin.pdf>.

¹⁵ Anna Gruzova, *Annual International Conference on Continuing Library and Information Sciences Education*, «The SET Bulletin: IFLA Education and Training Section», 16 (2015), n. 2, p. 9-10, <https://cdn.ifla.org/wp-content/uploads/files/assets/set/Bulletin/updated_2015_no._2_july_issue_set_bulletin.pdf>.

section. Besides that, students are always actively participating in the discussions, panels and round tables.

- Student journal called *Youth Bulletin of SPbSUC* that is published 4 times a year and collects student best papers.

- Student Annual International Library Festival “BiblioFest” is held from 2013 and brings together students, faculty, staff of the Department and other universities and cultural institutions both of Russia and other countries. The main objectives of the festival are to identify student creative potential, to strengthen ties between the community of the Department and other universities and organizations, to carry out activities aimed at drawing attention to the library and reading¹⁶.

- English Speaking Club for practicing English. At the Club’s meetings once a month or more often students and professors discuss the most relevant LIS topics in English, share their opinions about the LIS books and so on.

Collaboration with the LIS institutions and professional associations

The Department is very proud to cooperate with professional associations and international partners.

The University is a member of the Russian Library Association which means that our professors participate in the Annual Library Congress every year in different cities (this year because of the pandemic the Congress went online). The members of the Association’s Board participate in the Department events. For example, at the BiblioFest this year the Association followed all presented projects, picked the three most valuable works of all students and has invited their authors to participate in the next year’s Congress without a fee.

Through the Russian Library Association, the LIS Department has a representative from Russia in the IFLA¹⁷. Now, the Department is involved in the activities of the Building Strong Library and Information Science Education (BSLISE) IFLA Working Group¹⁸.

In 2021, the Department join as a partner to the Erasmus+ project Digital Education for Crisis Situations: Times When There Is No Alternative (DECriS) conducted by the Faculty of Humanities and Social Sciences, University of Osijek (Croatia) in partnership with Stiftung Universität Hildesheim (Germany), Universitat de Barcelona (Spain), University at Library Studies and Information Technologies (Bulgaria), University Computing Centre, University of Zagreb (Croatia), University of Sarajevo (Bosnia and Herzegovina), University of Mostar (Bosnia and Herzegovina), Victoria University of Wellington (New Zealand), and St. Petersburg State University of Culture (Russia)¹⁹. The DECriS project’s main goal is «to provide a better teaching and learning opportunities, especially in regards to the unpredictable circumstances such as Covid-19 which revealed that many HEIs faced problems of technical, socio-psychological and didactic nature»²⁰.

Challenges that the LIS Department faced during the Covid-19 pandemic and lockdowns

In the Department, we went fully distant three times: March-June 2020 (till the end of the Spring/Summer semester), during the general Covid-19 lockdown in Russia;

16 V. Brezhneva [et al.], *LIS education at the St. Petersburg State University of Culture* cit.

17 *Ibidem*.

18 <<https://bslise.org>>.

19 <<https://decris.ffos.hr>>.

20 <<https://decris.ffos.hr/summary>>.

December 2020-February 2021 (the end of the Autumn/Winter semester) and June 2021 (examination session of the Spring/Summer semester). The last two times were because some students have been diagnosed with Covid. The main problems the Department faced during the pandemic were these:

- Didactic issues. The lockdown made us go far in one day and, as it was pointed out earlier, only a few teachers have got the DL experience but we never organized the learning process of undergraduate and graduate students fully digital. So, from the first day, we faced having lectures, workshops, student practice, projects, evaluating student learning progress, managing teamwork and mentoring students online. Firstly, the teachers tried to organize DL similar to the traditional learning so students happened to be buried under the homework – the drills that were easy to do in the classroom amongst the classmates took a lot of time to do alone staying at home. That led to numerous complaints and decreasing in learning efficiency. These issues needed quick development and implementation of DL strategies and technologies – quite different from the ones we got used to.

- Technology issues. There were two types of problems: with LMS and with teachers and the students' home equipment. The LMS Mirapolis had happened to be incompatible with our new goals because it had a limit of parallel connections. We also had two more systems – the Student Portfolio and the Personal Account for communication between students and teachers. But the server's capacity immediately dropped with countless connections. Also, there was no integration in these systems which made it hard to use them. Even more, problems were caused by the lack of proper computers and software in teachers' and student homes. The lack of an Internet connection was a frequent occurrence when students have stayed in the countryside in different regions. Unfortunately, the University couldn't help with that so we have had to think of something by ourselves.

- Policy issues. There wasn't any clear and strict policy of DL in this complicated situation – not at the national, ministry or institutional level. That was anxious but also there was an opportunity to get freedom in decisions.

- Psychological issues. The lockdown and isolation situation were hard enough and the 'I-do-not-know-how-to-deal-with' feeling caused constant anxiety. Having other people around – family or roommates – was quite distracting especially when there were kids around who were seeking attention and help with school homework. Also, as a result of all new student tasks and homework that teachers had to check, there was another problem – the lack of time and the constant feeling that one is late with everything while working 24/7.

It was proven by the results of the short surveys that we ran among the students asking them questions like “Which way of learning is more efficient and comfortable for you – traditional or distant?”, “What problems were most crucial for you during the distant learning?”, “How would you improve the distant learning?”, “Which disciplines were hard to learn distantly and which were not?” and so on.

DL strategies to solve the Covid-19 pandemic educational issues in the LIS Department Technologies

From the first days of the lockdown, we started using Zoom videoconferencing to deliver lectures, consultation and group mentoring sessions. All videoconferences were recorded and then available for students and teachers on YouTube and other clouds. I would like to thank the Zoom developers – since this software is free, it was quite democratic and let us not interrupt interaction with students. As we didn't have a proper system for communication, we started actively using social media –

the most popular Russian social network VKontakte (VK) similar to Facebook. Seeing all these difficulties, the University started implementing Moodle as the most appropriate to DL LMS.

We compensated for the lack of equipment at houses by increasing the flexibility of teaching and learning. Teachers who didn't have proper equipment could choose different ways of teaching and sometimes come to the university to use the computers. Students could have a flexible schedule for sending their work and having tests and exams. Sometimes, we made individual student's plans, but I have to mention, that there were very few such cases.

DLE included learning and teaching materials and the digital library

The digital library designed by the academic library included OERs – publications of the University's teachers²¹, and proprietorial sources, for example, the best LIS database in Russian made by the St. Petersburg publishing house Professija that publishes a lot of textbooks, handbooks and monographs in the LIS field. The University's academic library gave free access to it online and worked hard on the improvement of the digital library. Besides that, the DL environment included a large set of unpublished teaching materials and guides of how to learn every discipline that we luckily prepared just before the pandemic.

Didactics

Developing new DL strategies of LIS education, we considered the main 'phenomenon' of the LIS profession including the 'phenomenon of wo/man' – librarians and readers; the 'phenomenon of texts' – digital multimedia funds; the 'phenomenon of digital reality' – library access to digital materials and providing the safety of digital fund². Among the didactic techniques to get that were these:

- Interactive multimedia lecture that presented and visualized key topic moments and included a lecture summary.
- Additional learning materials to support key moments in the DLE. Providing the students with access to it.
- Tests and other tools to control learning progress are aimed not at student repeating but at the understanding.
- Practice-aimed DL content, such as problem-based and project-based learning required from students to solve real professional life problems in small teams; drills with machine verification; with cross-checked verification; teambuilding and collaboration and discussion²³.

Organizing DL process

We concluded that we should reduce the time of lectures (no more than 40 minutes versus 1.5-3 hours of classroom lecture) and do them interactively; divide drills and practical work into small parts, each of them should be able to be done for an hour or two and have one clear result that could be checked quickly. And with most of the

21 See <<http://elibrary.spbguki.ru>>. It is a digital library with free access from the University website that doesn't need an authorization. All the materials can be downloaded to the user's device in PDF.

22 Irina S. Pilko, *Teaching digital technologies in the digital educational environment*, «Culture: theory and practice», 3 (2020), n. 36, <<http://theoryofculture.ru/issues/114/1362>> (text in Russian).

23 *Ibidem*.

works, we asked the students to do them in small teams. The explanation of how to do them and the discussion of the results was via Zoom, too – so there was a Zoom meeting once or twice a week on almost every discipline (students noted that it was helping them to stay in the right working mood). A teacher made a disciplined group chat in VK where all works were added and explained additionally if needed and where all students could ask questions and share their vision.

Lack of physical interaction was hard but there were also good learning outcomes – before that there were always some students who constantly missed classes, but it got different online since the communication became more personal and it was easier to see their results.

Student projects and research

We started focusing on problem-based and project-based learning online motivating students to work together exploring professional problems through projects and research that needed a deeper knowledge in the field. A project usually meant solving some library problem like improvement of the library innovation process or social media promotion, design of new library services, creating video and audio content, managing and navigating online resources, users' information and media literacy. To do that, teams of students identified the problem, made research, formulated key tasks and planned the time, distributed the teammates' responsibilities to complete the project effectively. The research included informetrics (bibliometrics, webometrics, altimetric), information analysis (morphological, semantic, content, and so on), research of human information interaction, information needs and values of different types of users, user satisfaction with the quality of library services, library and information marketing research and so on.

It can be illustrated with the 1st year undergraduate student library practice that we had soon after the lockdown started. The practice was in a dispersed form which meant that for a couple of months students spend one day every week training in a library. We never had it online before, but it was even harder to manage that considering that the libraries have struggled with their pandemic issues and there was a feeling that they would refuse to find new ways of working with students. But libraries got similar problems, so librarians were finding their way to use new technologies and agreed on help. So, we got 4 libraries of different types: the city library, a small public library, the academic library of the military medical academy and a children's library. The schedule of our work was this: together we discussed the project tasks in Zoom, students worked online in small teams, and we discussed the results. To do so, we did group chats in VK and had regular Zoom meetings. The projects students worked on were these:

- The City Library team made the research of social media activity of the St. Petersburg public libraries that are united in the Corporate Network of Public Libraries (CNPL) with the City Public Library named after Vladimir Mayakovskiy as a methodical center²⁴. The colleagues from the city library formulated the methods of the research very clear – they needed content analysis of social media activity to see how the CNPL libraries present the corporate services and how active they are. The results mattered for them as a part of bigger annual research.

- The Public Library named after Alexandr Griboedov – a division of the Interdistrict Centralized Library System named after Michail Lermontov – asked a student team

to help with searching materials for their patriotic project. Also, students were asked to give recommendations on the improving library's social media activities and think of ways to design the library's identity.

- The Academic Library of the Military Medical Academy named after S. M. Kirov asked a student team to do a selection of digital medical resources for the DL supply.
- The Children Library Treasury Island involved a student team to manage their virtual events for children and after some time even let the students administrate the library's online profile in VK. There was a big library event they participated in called "Reading a Book in Pajamas"²⁵ during which different activities for children were opened on the library's VK profile page during the evening – Zoom interviews and workshops, book trailers, literary games, cognitive contests and so on. The goal of the event was to involve children and parents and to show them that sitting at home can be quite productive and funny.

All the results students got were discussed at the final Zoom meeting where all teams shared the experience of working in different types of libraries. Among the benefits of this form, there was an opportunity to monitor the student's progress in real-time and react quickly if something went wrong. It was possible because of the group chats where students and their library supervisors discussed what had to be done and because of the regular Zoom meetings. Before the DL, supervisors didn't have much time to visit students in their libraries so they could mostly see only the results. Online communication should be used when student library practice came back to normal 'physical' form.

As was mentioned before, we've got the SSC and ESC clubs for students and during the pandemic, we started having their meetings and consultations online – via Zoom and in the group and personal chats, in the SSC public so the participants didn't stop conducting research. Some of the students were encouraged to participate in some online scientific conferences (we canceled our conference during the lockdown but some other universities, for example, Kemerovo State University of Culture had some distantly) and to publish some papers with their findings.

The ESC became quite useful because our already mentioned partner IFLA BSLISE Working Group started getting online workshops for LIS students about the LIS profession and soft skills and so on and the students were really interested in them. So, we've got the ESC meetings before IFLA workshops and practicing in speaking the topics.

The "BiblioFest" – 2020 was canceled but the students got an opportunity to develop online projects during the Summer – of 2020 and there were grants from the Ministry for the most relevant ones. The students presented the long-running ones on the "BiblioFest" – 2021. There were projects of increasing the information, media and academic literacy of library users, career guidance for LIS students, enhancing the image of the library, DL projects. All of them were quite useful not only for students but for librarians and teachers, too.

For example, the project Educational Internet was organized by the first and second years undergraduate students who have been working on the topic in SSC and could combine their findings with real-life problems. The project had a goal to increase children's information and media literacy. During the project, students made a profile page in VK where they started posting educational materials for children and selected internet resources for school education. The demand for such materials has grown enormously during the pandemic among the parents and children who had to learn

at home. The Treasure Island library reposted their posts and was quite interested in that. After that, another children's library – Regional Children Library – invited the students to participate in the meetings of their two big children's movements – the School of Children Reading and the Book Way. These movements have brought together wide communities of children all over the region involving them in researching literature and local history activities and quests over the years. During the pandemic, these movements went online via Zoom, YouTube and VK. The students organized workshops and brainstorms with the children discussing the media literacy and questions of personal safe learning space on the Internet. The results were reported at the conferences and some of them were published²⁶.

Assessment and evaluation of student learning progress

Assessment and evaluation of student learning progress online required us to develop new approaches. Traditionally, it was carried out by exams – when a student 'pulls out' a random 'ticket' with questions, prepare the answers for 30 minutes and then tell them to the teacher. Of course, it could be done by video conferencing the same way, however, there is a high probability to use the textbook or other sources and copywrite the answer. Therefore, it was necessary to develop new principles. In my opinion, the most efficient are online quizzes combined with solving cases – situational problems. In addition to a more complete teacher's understanding and assessment of student knowledge, such forms are more interesting and useful for students in comparison with the traditional exam that usually stresses students a lot and doesn't really show the real picture. That was proved to be true.

To illustrate that, I would like to present examples of quizzes and cases that I made in the disciplines of information research and information management. The Information research consists of three main blocks:

- Science and scientific knowledge as an object of research.
- Bibliometrics.
- Patent research.

In accordance with these blocks, three blocks of questions were formed – 12 questions of varying complexity in each block. All questions were formulated extremely clear with the possibility of only one short correct answer and were divided according to the difficulty. The correct answer to a simple question gave to a student one point, to a difficult one-two point. The questions were both theoretical ("The definition of bibliometrics is...") and practical case studies ("Calculate a scientist's Hirsch index in a given situation"). To some questions, metaphorical answers were recognized as correct (for example, to the question "what is science studies?" the answer "science about science" was counted as correct; to the question "what is the effect of Matthew in science?" a biblical quote was accepted, etc.).

The questions that happened to be hardest to the students have worked out additionally, amongst them were the calculation of the Hirsch index and the impact factor of a scientific journal. For practicing, several more similar tasks were formulated and solved together with students.

26 Anna Gruzova; Dasha Vernova, *Children's libraries internet promotion for the development of information literacy*. In: *Culture and art: searches and discoveries*. Kemerovo: Kemerovo State University of Culture, 2020, p. 46-52, <<https://elibrary.ru/item.asp?id=44142550>> (text in Russian); Dasha Vernova, *Information literacy in children's libraries*, «Youth bulletin of St. Petersburg State University of Culture», 1 (2020), n. 13, <https://spb.gik.ru/upload/file/publishing/mol_vest/mol_vest_1_13_2020.pdf> (text in Russian).

The quiz was done by MS Power Point with cross hyperlinks and Zoom video-conferencing. The base of the quiz was Power Point presentation that started with the slide with questions' numbers. The numbers were hyperlinked with the slides with questions. On the slide with a question, there was a link to the slide with the answer. On the slide with the answer, there was a link to the main slide.

The first three slides after the title contained question numbers, each was a link to a question slide. Numbers were highlighted in different colors (simple questions in black, complex – in red) so the students couldn't know the content just a complexity level. On the question slides, there were hyperlinks titled "Correct Answer" to the answer slide. On the answer slide, there was a "Back to Questions" hyperlink leading to the slide with question numbers.

During a Zoom meeting with the students, the quiz presentation was opened in screen sharing. The ability to write a private message to the teacher made it possible during the quiz to accept answers from all students, and not just from the respondent. The order of the quiz was this. One of the students – voluntarily or according to the list – chose the question number. After opening the question, she had 40 seconds to formulate an answer for a simple question and 60 seconds for a difficult one. At this time, all other students wrote the correct answers in private messages to the teacher. In my opinion, even if a student does not know the correct answer but can find and write the correct answer in 40 seconds, this means that she knows how to navigate the educational resources and has the competence of quick information search ('knew where to find') – and it is a lot of knowledge. When the time was up, the student who chose the question gave her answer orally. If the answer was wrong, the students corrected it. In the case of difficult questions, as indicated above, the correct answer was worked out on repetition with the participation of all students. All students who gave the correct answer received scores.

Based on the results of the quiz, it can be stated that the students showed great interest in answering questions. To my great satisfaction, all students managed to give a lot of correct answers – even those who were missing classes. In addition, such an online quiz seems to be an instructive tool of a new type – not 'punitive' like an exam, during which students experience great stress from the fact that they 'fail', but a tool that indicates weaknesses in understanding the material and requiring additional study by students. This was noted by the students themselves²⁷.

Cases on the other hand could be more complex with taking more time to do them. In the Information management discipline, I was looking for student understanding of the information management process in different organizations in all complexity with the synergetic outcome. It includes the functions of information management, unified information policy and its standards, targeting the groups of users and their information needs, different types of documentation systems in the innovation process and the technology transfer, ways of choosing and implementing corporate information system, business analytics and development of comfortable human information interaction environment. Solving the cases showed student knowledge the best way. For example, the case could be this.

²⁷ Anna Gruzova, *Online quiz as a tool of assessment and evaluation of LIS student's knowledge*. In: *Information technologies, computer systems and publications for libraries: proceedings of the 24th International Conference "LIBCOM-2020"*. Moscow: Russian State Public Scientific and Technical Library, 2020, p. 38-40, DOI 10.33186/978-5-85638-231-9-2020-38-40 (text in Russian).

A construction company “Northern Pearl” carries out orders for construction, commissioning, overhaul and reconstruction of buildings and structures of industrial construction. The company has a staff of specialists (30 people) who design the construction and do survey work. The age of these specialists is 50 years and more. All of them have specialized education in architecture and construction, but they graduated quite a long time ago. All designers also have extensive experience. The company started thinking about implementing BIM technologies in the design. The company chooses a BIM system, but worries about how it will suit them.

The questions for solving the case are these: describe the subject field – the activities of the organization including the organizational structure, goals and objectives, information flows and workflow, types of documents; determine the main types of requirements for the information system following the case, including the definition of the main groups of users and scenarios of their behavior, functional and non-functional requirements for the system; identify information systems that meet the requirements of the task. For preparing an answer students had from a couple of days to a week depending on the difficulty. There were different cases, and they can be easily changed.

Managing psychological issues

To manage anxiety, we strengthened the supervising and mentoring work by having regular group and individual Zoom meetings with students letting them share their problems and trying to find some ways to deal with them together. For example, advising them to organize a special working place like a desk and to manage the time they spent on it to avoid the feeling of constant working. Or to have a time checker that would prevent them from spending too much time finishing a task. Also, we started to communicate online in the social network more often, sometimes even at night.

Conclusion

The pandemic was a terrible and hard time for the LIS Department but I can say that we managed to survive and even improved the educational process by using DL. Even having some experience of DL, we faced hard problems with the necessity of quick transfer the learning process of undergraduate and graduate students online.

During the Covid-19 pandemic and lockdowns, the LIS Department faced didactic, technologies, policy and psychological issues. Didactic problems were caused by a lack of experience among teachers in organizing undergraduate and graduate DL. The attempt to organize DL in the same way as traditional learning almost immediately failed. These issues needed quick development and implementation of DL strategies and technologies. There were two types of technological problems: we didn't have a proper LMS system and there was a lack of proper computers and software in teachers' and student homes. We had to deal with them by ourselves because there wasn't any clear and strict policy of DL at the national, ministry or institutional level. Besides that, the lockdown and isolation situation were psychologically quite hard to deal with. It caused constant anxiety and the feeling that one is late with everything while working 24/7.

We developed some new DL strategies to solve the Covid-19 pandemic educational issues in the LIS Department. Technologies we used were Zoom videoconferencing and Russian social network VK. We compensated for the lack of the equipment at homes by increasing the flexibility of teaching and learning.

Big help for DL was our DL environment included learning and teaching materials and the digital library. Our academic library did its best to improve the environment

according to dynamically changing educational needs and gave free access to OERs and proprietary sources.

We organized DL process using didactic strategies such as delivering short interactive lectures via Zoom and then keeping their records. To support student communication and discussion about the discipline topics, teachers made group chats in VK where all works were added and explained additionally if needed and where all students could ask questions and share their vision.

We focused on problem-based and project-based learning online motivating students to work together exploring professional problems through projects and research that needed a deeper knowledge in the field. The project usually meant solving some library problems like improvement of the library innovation process or social media promotion, design of new library services, creating video and audio content, managing and navigating online resources, users' information and media literacy. To do that teams of students identified the problem, made research, formulated key tasks and planned the time, distributed the teammates' responsibilities to complete the project effectively. The research included informetrics (bibliometrics, webometrics, altimetric), information analysis (morphological, semantic, content, and so on), research of human information interaction, information needs and values of different types of users, user satisfaction with the quality of library services, library and information marketing research and so on. That is illustrated by the results of 1st-year undergraduate student library practice that we had soon after the lockdown started. We got 4 libraries of different types: the city library, a small public library, the academic library of the military medical academy and a children's library, they cooperated despite struggling with their pandemic issues. The schedule was this: together we discussed the project tasks in Zoom, students worked online in small teams, and we discussed the results in group chats in VK and during regular Zoom meetings. There were projects with the City Public Library named after Vladimir Mayakovskiy (research of social media activity of the St. Petersburg public libraries that are united in the Corporate Network of Public Libraries (CNPL); the Public Library named after Alexandr Griboedov (searching materials for their patriotic project, preparing recommendations on the improving library's social media activities and think of ways to design the library's identity); the Academic Library of the Military Medical Academy named after S. M. Kirov (a selection of digital medical resources for the DL supply); the Children Library Treasury Island (managing virtual events for children, administrating the library's online profile in VK). All the results were discussed at the final Zoom meeting where all teams shared the experience of working in different types of libraries. With all that, there was a chance to monitor the student progress in real-time and react quickly if something went wrong because of the group chats where students and their library supervisor had discussions and because of the regular Zoom meetings.

We also made new ways of assessment and evaluation of student learning progress online with online quizzes and solving cases.

To manage anxiety, we strengthened the supervising and mentoring work by having regular group and individual Zoom meetings with students letting them share their problems and trying to find some ways to deal with them together (sometimes 24/7).

I believe that we all got stronger and more professional during this time. Now we are implementing Moodle in the educational process, and I believe next academic year will be easier with it. I also hope that participating in the Erasmus+ project DECriS will improve our vision of DL.

I realize that one can see our experience a bit like a 'bicycle invention'. But I always do hope that at least some things will be useful for other LIS universities and also believe that we should share our strategies more often because of the narrowness of the LIS field.

Articolo proposto il 12 luglio 2021 e accettato il 28 ottobre 2021.

ABSTRACT AIB studi, 62 n. 1 (gennaio/aprile 2022), p. 125-139. DOI 10.2426/aibstudi-13288
ISSN: 2280-9112, E-ISSN: 2239-6152 - Copyright © 2022 Anna Gruzova

ANNA GRUZOVA, Department of Library and Information Science, St. Petersburg State University of Culture, Russia, e-mail gruzova26@gmail.com.

L'insegnamento della LIS durante la pandemia: l'esperienza del LIS Department della St. Petersburg State University of Culture, Russia

L'articolo esamina le sfide e le opportunità che il Library and Information Science Department della St. Petersburg State University of Culture ha affrontato durante la pandemia di Covid-19.

I problemi didattici erano dovuti alla mancanza di esperienza tra i docenti nell'organizzazione dell'apprendimento digitale (*digital learning*, DL). I problemi tecnologici sono stati di due tipi: la mancanza di un adeguato *learning management system* (LMS) e quella di computer e software adeguati sia tra i docenti sia tra gli studenti. Non esisteva in precedenza una politica chiara e rigorosa di DL ma, in qualche modo, questo ha fornito flessibilità nell'organizzazione dei processi di apprendimento. Inoltre, la situazione di chiusura e l'isolamento sono stati psicologicamente molto difficili da affrontare, generando un'ansia costante e una sensazione di perenne ritardo, pur lavorando tutti i giorni.

Per affrontare questi problemi sono state elaborate nuove strategie di DL, facendo ricorso a tecnologie 'a portata di mano': la videoconferenza su Zoom e il social network russo VKontakte; la mancanza di attrezzature a casa è stata compensata dall'aumento della flessibilità dell'insegnamento e dell'apprendimento, si è sviluppato un ambiente DL che includesse materiali di apprendimento e di insegnamento, nonché una biblioteca digitale. Si è ricorso alla didattica a distanza con brevi lezioni via Zoom, sia sincrone sia asincrone. L'apprendimento online ha avuto un approccio *problem-based* e *project-based*, motivando gli studenti a lavorare in gruppo e su casi di studio concreti. Sono stati inoltre elaborati nuovi sistemi di valutazione dei progressi dell'apprendimento degli studenti con quiz online e risoluzione di casi. Per gestire l'ansia, si è rafforzato il lavoro di supervisione e di *mentoring*.

Nonostante le nuove sfide e le tendenze portate dalla pandemia, il dipartimento ha conservato le sue tradizioni educative che hanno permesso il miglioramento della qualità generale dell'istruzione.

LIS education during the pandemic: the experience of the LIS Department, St. Petersburg State University of Culture, Russia

The paper reviews challenges and opportunities that the Department of Library and Information Science of St. Petersburg State University of Culture (Russian Federation) faced during the Covid-19 pandemic. Didactic problems were caused by a lack of experience among teachers in organizing undergraduate and graduate digital learning (DL). There were two types of technological problems: a lack of a proper LMS system and a lack of proper computers and software in teachers' and student homes. There wasn't any clear and strict policy of DL but in some way, this has provided flexibility in the organization of the DL process. Besides, the lockdown and the isolation situation were psychologically quite hard to deal with: it caused constant anxiety and the feeling that one is late with everything while working 24/7. To deal with these issues, we developed some new DL strategies, used technologies that were 'in hand': Zoom videoconferencing and Russian social network VKontakte, compensated for the lack of the equipment at home by increasing flexibility of teaching and learning,

developed the DL environment that included learning and teaching materials and the digital library. We organized the DL process using didactic strategies such as delivering short interactive lectures via Zoom and then keeping their records. We focused on problem-based and project-based learning online motivating students to work together exploring professional problems through projects and research that needed a deeper knowledge in the field. We also found new ways of assessment and evaluation of students' learning progress with online quizzes and solving cases. To manage anxiety, we strengthened the supervising and mentoring work. With the new challenges and trends of the pandemic, the Department has been preserving its educational traditions that allowed for the improvement of the quality of education.