HOW TO PRESERVE QUALITY OF HIGHER EDUCATION DURING PANDEMIC AS NON-RHETORICAL QUESTION

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Abstract: In the report for the first time, as far as we know, the rhetorical questioning of the content of the material on preserving quality of education in a pandemic period is replaced by concrete and recommendatory one. In our study we have followed evidence-based approach. Conclusions made under analysis of experience of the European Higher Education Area (EHEA) universities are presented.

Introduction. Forced mass distance learning, which has become one of the main markers of the 2020s, has exacerbated many problem areas of educational systems. Faced with the threat of the spread of coronavirus infection, most universities have switched to distance/remote learning. Consequently, all face-to-face classes, including lectures, tutorials, and labs, have been moved to the online environment. Such a drastic transition to distance learning is a forced and urgent measure; not all universities were ready for such a radical restructuring of the educational process.

Another important issue was academic mobility. As cross-border mobility has become largely illegal, some international students and staff may have ended up with expiring grants, visas, and residence permits and found themselves in double isolation due to the pandemic and remoteness from their long-standing social networks of family and friends. This was a key issue for both the host and the sending universities, which provided a variety of support for international staff and students, from psychological counseling and additional financial support to extended stays or increased travel costs [1]. Of course, the stressful situation for all participants cannot but affect the attitude towards online learning and other information educational technologies.

Many scholarly and public articles raise the topic of preserving quality of learning during a pandemic, but no concrete answers are usually provided. In our paper using the EHAE experience we demonstrate our findings in the manner – "from information to evidence".

It is worth to mention that very recently (on September, 15, 2021) European Commission President Ursula von der Leyen held her yearly speech on the state of the Union. Unsurprisingly, she focused on pandemic responsiveness and preparedness with further moves towards a health union, as well as Europe's recovery from the crisis. Von der Leyen declared the digital transition as the "make or break issue" for Europe, underlining the need to strengthen technological sovereignty by ensuring development of know-how and supply from within Europe. Also, Europe's youth played an important part in her speech as she gave credit to the efforts young people made during the pandemic while studying from home to protect mainly other more vulnerable parts of the population. 2022 will be the European Year of Youth with specific initiatives, including a program to support cross-border mobility for young people who are not in employment, education or training.

Media reports and surveys suggest that many international students will defer or study in home or neighbouring countries to avoid quarantines and uncertainties about the host institutions' operation modes, as well as the risk of ending up in "online learning abroad" at relatively high tuition fees. Education plays a key role in international understanding and is closely linked to research and innovation cooperation. Student exchanges are a main pillar of universities' international engagement and, given the importance of research-based learning and the increased recognition of experiential learning – including student innovation, it would be logical to underline the synergies between education, research and innovation in international engagement. Moreover, education prepares graduates for research and for implementing the findings of research results. The crisis also disrupted research activities due to restrictions on international researcher mobility, resulting in obstacles for research collaboration, the closure of labs and the shift to remote collaboration. Critical was also the situation of early career researchers delayed in their projects. International doctoral candidates are at greater risk, as they often do not have local support networks and may be additionally affected by the situation in their home country. While European Commission funded grants could be deferred or prolonged, they would often not provide additional funding, leaving the researcher without income unless the university decided to cover [2].

1. Digital Enhancement of Educational Process

Different types of digital skills training for students are provided at many higher education institutions, but not to all students, and not always embedded into the curriculum. However, introduced in EHEA so called Digital Enhanced Learning Technologies (DELT) approach is not only about different types of provision, it also has consequences for assessment, recognition and quality assurance.

1.1 Online programs

At a time, when institutions were accused of being either incapable of or resistant to embracing innovative learning technologies, this was a bit of a surprise. Online degree programs were not very visible and tended to be offered in just a selection of faculties. This confirmed that for most institutions, with the notable exception of open universities, they were just a complementary provision for experimentation targeting a specific learner group, that was linked to a project or external collaboration.

1.1.1 Massive Open Online Courses (MOOCs and Open Learning)

A few years ago, MOOCs stirred considerable debate on the future of higher education. While their transformative impact may have been less radical than assumed at the time, they have established their place as the second most frequently used online provision mode, after short courses and before online degree programs.

Universities may have needed time to explore how exactly MOOCs can be used. Generally increased awareness and prioritization for access, inclusion, and diversification of participation, but also the growing importance of the third mission, services to society, may have played a role. Overall, responses suggest that institutions use MOOCs for rather different purposes, which confirms them as a versatile form of provision. Legal regulations could explain why "supplementing or replacing oncampus teaching" did not feature among the top three motivations for offering MOOCs and open learning. Some systems limit the use of online, offcampus learning as part of degree programs, or require special accreditation for it. In some countries, institutions cannot even demand their students to access their own MOOCs when hosted on platforms abroad, usually in the US, for data protection reasons. Despite its reputation and taking into account our experience we conclude that online learning is not usually so easily provided, and not automatically borderless.

1.1.2 Non-degree Short Courses

According to the survey [3] short courses are seen by more than half of the institutions as a flexible way to provide lifelong learning (55 %), which aligns with the fact that those that mainly target mature and adult

students are more likely to offer short online courses (80 %). At just under half of the institutions, the resulting certificates can also be recognized for further degree study, and 43 % affirmed that for some students, they were an alternative to studying for a master's degree.

Short courses, or "micro-credentials", currently enjoy a relatively high priority on a European and some national policy levels. Hence, is it quite likely that micro-credentials and other non-degree short online provision will become a more universal feature of the European higher education landscape, provided this doesn't suffocate a flexible format that has proven itself useful for learners and feasible for institutions, as underlined by the MICROBOL report. This would then be yet another difference to MOOCs: they became a useful format in the wider education landscape, once they had been stripped of overrated expectations and unsubstantiated predictions.

1.2 Blended learning

Blended learning continues to be the most popular digital delivery mode and has become mainstreamed within institutions.

We differ at least 12 of the most common types of blended learning. Blended learning is a model combining face-to face classroom teaching and the innovative use of ICT technologies. As often remarked, "blended" may include a broad range of different approaches, that may differ considerably between institutions and disciplines. Levels of sophistication may also differ, regarding learning design and its underlying didactic approaches, ranging from recorded lectures providing flexibility for students, and teachers, to a thoroughly designed curriculum, balancing not only physical and virtual presence, but also synchronous and asynchronous work, with aligned assessments. As technologies improve and become more accessible, and institutional experience and capacity is growing and more widespread, this is likely to generate new and more differentiated formats and concepts. For example, over the past months, hybrid learning has gained popularity, as formats offered simultaneously to on-site and distance learners, and beyond a flexible combination of different learning approaches and modes, enhancing students' choice, learning quality and organizational options. Interinstitutional exchange and collaboration, and more in-depth interest at policy levels will contribute to establishing more commonly shared terminologies [3].

2. Academic virtual mobility

It is worth noting that the rate of student mobility during a pandemic has declined. And given the current global pandemic situation (COVID-19), accompanied by restrictions and bans of certain states on the transnational

movement of citizens, the coming academic year 2021/2022 will be characterized by an even greater decline in student mobility activity, which is likely to affect even those countries that have so far demonstrated a steady increase in this indicator of internationalization of higher education services.

Based on this, one solution to the issue may be virtual rather than physical mobility. Like blended learning, virtual mobility is a broad concept, sometimes including joint courses and international recognition and accreditation of learning achievements. In the most cases virtual mobility refers to higher education students (faculty) who study (teach) at another institution outside their home country without physically leaving their homes. Another approach is related to creation of international joint higher education institutions as a basis for intellectual mobility [4].

Further, the use of digital assessment increased exponentially. This meant that institutions that normally conducted assessments on site had to find new ways to ensure data protection and academic integrity. With this in mind, institutions revised, developed and disseminated policies, procedures and tutorials regarding the delivery of digital assessment. They introduced systems to oversee exams conducted online and guided students in avoiding academic misconduct. However, in many cases institutions refrained from using proctoring software as a result of the distress and opposition the use of such software generated among students, who questioned what data would be collected, when and where it would be collected and how it would be stored.

In this regard, mechanisms for assessing the quality of education are seen as a central of getting feedback. The key positions are occupied by assessment tools, which allow getting feedback promptly and adjusting the educational process on its basis. Such assessment tools include:

– continuous diagnostics (through feedback) not only of the results, but also of the process, participation of the teacher, child, administration, and parent. The question of understanding of the material, the ability to build cause-effect connections becomes a priority over the assessment of "mastered" or "not mastered; Low-stakes assessment as a tool for ongoing, real-time feedback of action and results;

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– formative assessment, allowing for operational adjustments educational strategy to improve the quality of education. This is one of the key tools of assessment in the new conditions, but it is constantly evolving,

because it needs to be developed quickly following a constant revision and updating of the "rules of the game";

– "quick"/operational feedback formats that include short quizzes, tests, online surveys;

– "richness" of options instead of standard tests. Electronic services today have a rich toolbox of question types that go beyond single or multiple choice. "Correctness" is no longer defining concept, the process of creative thinking itself becomes a priority. Digital tools take advantage of the opportunities offered by answering with a web-based device (as opposed to a physical clicker). For example, Poll Everywhere has "Word Cloud" and "Clickable Image" question types, a Learning Catalytics supports different types of questions that involve graphics (e.g., drawing a graph of a function);

– ergonomic final grades with high standards of accountability and awareness (24-hour online exams while averaging a grade that is based on a higher rather than a lower score).

Conclusions. The pandemic served as an urgent reason to accelerate transformation of educational programs and corresponding innovations related to methodology and technologies. Most institutions were able to respond fairly quickly, often applying and expanding existing DELT strategies and policies, as well as introducing and expanding practices that had already been used to some degree.

The directions that institutions chose during the crisis were aimed at managing the health care crisis, but not at providing better learning and teaching, and were likely unrelated to their mission. Consequently, it is safe to predict that many will be dysfunctional in a post-Covid-19 environment, and once choice becomes possible again, there will naturally be intense pressure-as in other sectors-to return to "normality," which means the physical delivery of face-to-face services on campus. But in this situation, it would be strategic to ensure that DELT does not turn into emergency mode to get back in the box before the next pandemic, but rather to maintain momentum and seek to maintain and develop elements and aspects that worked well and could benefit after the crisis [5].

However, evidence on the effectiveness of certain pedagogical techniques and teaching approaches can effectively inform improvements in a program. Innovation using information technology, for example, is one area where evidence is important to avoid either going along with a hype or rejecting good ideas due to prejudice and unfamiliarity. ICT in teaching may encounter some resistance from academic staff who themselves have not been exposed to such teaching practices, but evidence can convince

not only about the effectiveness of such practices for student learning but about cost-efficiency that is highly needed under increasing resource constraints in higher education. As many programmes are experimenting with alternative teaching modes, such as flipped classroom or online learning environments for a specific course, it is possible to study the effects of such changes in a specific context. Bowen et al. (2014) is an example of a rigorous and large-scale study evaluating the outcomes of switching an introductory statistics course to a partly online format. The study indicates no significant difference in learning outcomes while producing significant savings in terms of instructional costs. Such evidence is thus valuable for designing an effective higher education programme and to use scarce resources with maximum efficiency [6].

As innovation continues to emerge bottom up, and in rather unpredictable ways, and as there is no blueprint for the higher education that Europe needs in the future, it will be important to ensure exchange and cooperation on DELT, and its various aspects. The innovative ideas will likely come from students and staff, not from institutional leadership, and not from the ministries. But institutional, national and European level measures could provide an important contribution through strategies, elimination of obstacles and provision of services and infrastructures. Beyond what takes place already at institutional and national levels, the ongoing policy processes of the European Education Area and the EHEA can be expected to provide good opportunities for short-cuts in aligning policies and institutional practice, and provide a more even level playing field across Europe.

Importantly, it is also, but not exclusively, a discussion of technology and how it can and should be used in a socially and ethically acceptable manner. It is primarily a discussion of learning and teaching. This discussion might consider more sophisticated approaches to "blended learning," whether hybrid learning or Hyflex, aimed at overcoming the fixation on face-to-face physical learning versus face-to-face online learning, as well as using a wider range of learning opportunities and modes. More generic and networked approaches within and across institutions could also be considered, as well as incorporating lifelong learning using any other formats that are feasible and beneficial, including perhaps micro-credentials.

The material presented allows us to identify the following key factors for the successful organization of the educational process during the pandemic, which form the potential for preserving the quality of higher education:

1) institutional autonomy, allowing institutions to make decisions and act promptly, accompanied by adequate institutional strategy, leadership and capacity to manage change;

2) flexibility of institutional decision-making to facilitate local adaptations, for example at faculty and program level;

3) quality culture, based on ownership of and commitment to quality shared by all members of an institutional community;

4) willingness of staff to innovate and experiment to find solutions and adapt;

5) collaboration and sharing of experiences across the institution and between institutions to seek solutions to the challenges faced;

6) transformation of Jan Comenius' Golden Rule of Learning: visualization of reality, animation, 3D modeling, and remote observation [7];

7) efficient communication between institutional management, staff and students [8].

At the same time, a number of questions remain relevant in the long term. How widely will virtual exchanges and remote work be used? Will blended learning become not only a remedy in times of social distance, but also a means for more flexible and better learning, and generally a smoother transition from virtual to physical? How will the experience of the crisis affect collaborative research and increase open access?

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