THROUGH SCHOOL STUDENTS’ EYES
Impact and Challenges of COVID-19 on Education Systems in Europe
# CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>5</td>
</tr>
<tr>
<td><strong>01 INTRODUCTION</strong></td>
<td>6</td>
</tr>
<tr>
<td>1.1 Background</td>
<td>8</td>
</tr>
<tr>
<td>1.2 Methodology</td>
<td>9</td>
</tr>
<tr>
<td>1.3 Contributions</td>
<td>13</td>
</tr>
<tr>
<td>1.4 Limitations</td>
<td>14</td>
</tr>
<tr>
<td><strong>02 WHAT’S THERE TO LIKE ABOUT SCHOOL?</strong></td>
<td>16</td>
</tr>
<tr>
<td>2.1 The “human” side of school</td>
<td>17</td>
</tr>
<tr>
<td>2.2 Contents and modalities of teaching</td>
<td>18</td>
</tr>
<tr>
<td>2.3 Physical and digital infrastructure</td>
<td>19</td>
</tr>
<tr>
<td><strong>03 THE DIGITAL TRANSITION</strong></td>
<td>21</td>
</tr>
<tr>
<td>3.1 Physical vs digital infrastructure</td>
<td>22</td>
</tr>
<tr>
<td>Digital and Physical Infrastructure - Our Recommendations</td>
<td>25</td>
</tr>
<tr>
<td>3.2 Barriers to access</td>
<td>26</td>
</tr>
<tr>
<td>3.3 Learning losses</td>
<td>32</td>
</tr>
<tr>
<td>3.3.1 Subject specific challenges</td>
<td>33</td>
</tr>
<tr>
<td>Subject Specific Challenges - Our Recommendations</td>
<td>37</td>
</tr>
<tr>
<td>3.4 Methods of teaching and learning</td>
<td>38</td>
</tr>
<tr>
<td>3.4.1 Project-based learning</td>
<td>39</td>
</tr>
<tr>
<td>3.4.2 Homework</td>
<td>40</td>
</tr>
<tr>
<td>3.5 Teachers’ skills for online teaching</td>
<td>43</td>
</tr>
<tr>
<td>3.6 Assessment methodologies</td>
<td>47</td>
</tr>
<tr>
<td>Methods of Teaching and Learning - Our Recommendations</td>
<td>51</td>
</tr>
<tr>
<td><strong>04 STUDENTS’ WELL-BEING</strong></td>
<td>53</td>
</tr>
<tr>
<td>4.1 Contributing factors</td>
<td>54</td>
</tr>
<tr>
<td>4.2 Sources of worries</td>
<td>55</td>
</tr>
<tr>
<td>4.3 Coping mechanisms</td>
<td>58</td>
</tr>
<tr>
<td>Students’ Well-being - Our Recommendations</td>
<td>61</td>
</tr>
<tr>
<td><strong>05 CONCLUSION</strong></td>
<td>62</td>
</tr>
<tr>
<td><strong>LIST OF REFERENCES</strong></td>
<td>64</td>
</tr>
<tr>
<td><strong>ANNEX 1: LIST OF TABLES</strong></td>
<td>67</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

This report was produced by the Organising Bureau of European School Student Unions in the framework of the Stronger School Student Unions supported by the Open Society Foundations.1

Authors
Gilda C. Isernia with the support of Rute Nunes

Editors
Rute Nunes
Samira Boumakdi Isabel
Giuseppina Tucci

Acknowledgments
The Research Team would like to thank the following people for their support and their incredibly insightful contribution:

The OBESSU Team, and particularly Juan Manuel Baez and Ettore Bucci for their contributions and Eleonora Murru for the coordination of the graphic design.

The OBESSU Board for their continuous engagement, guidance and support.


We also would like to thank the following organisations for contributing in different and insightful ways to the report, as described in paragraph 1.3:
Our Member, Candidate and Affiliate Organisations
Association for Teacher Education in Europe
Austrian National Youth Council
Centre for Intercultural Dialogue
EuResist
European Disability Forum.

1. The views expressed in this report are those of the authors. The support provided by OSF for the production of this publication does not constitute endorsement of the contents which reflects the views only of the authors, and the Open Society Foundations cannot be held responsible for any use which may be made of the information contained therein.
EXECUTIVE SUMMARY

The outbreak of the Covid-19 pandemic represented, for many EU countries, the biggest disruption to educational continuity since the Second World War. School closures impacted over 17 million students. National governments set their priorities: reducing the number of deaths, managing borders, alleviating the pressure on strained public healthcare systems, protecting the economy. Yet a consensus is building that this crisis is and will disproportionately affect young people, if only for the sole fact that they are going to live the longest through its consequences.

This report seeks to amplify school students’ voices bridging the last two academic years disrupted by the pandemic. It focuses on the instruction they received, its contents and modalities, students’ overall well-being, and their views on the actions to take in order to “build back better”.

Findings informing the analysis were collected throughout a six-month inquiry of mixed qualitative methods involving over 1,000 students and teachers from different European countries. Most of the data gathering was conducted a year after the first closures, between March and April 2021, at a time where the fast-changing nature of the crisis was becoming painfully clear: re-openings are not forever, and infection rates fluctuate at a dizzying speed. The time for short-term, emergency solutions was past its expiration date.

The study finds the impact of the pandemic on education systems to be both heavy and disproportionate, and generally dependent on past neglect. Cuts to the public sector in the last decades contributed to stagnating methodologies, underdeveloped facilities and more precarious working conditions for teachers. This made it so that school systems in most of the EU were not prepared to guarantee digital learning for all students. Contributing to the distress, impotence and uncertainty experienced across the board by young people is the fact that their needs and circumstances were seldom taken into account while devising strategies to offset the crisis - a political continuum of marginalisation that we argue, bypasses the Covid-19 contingency. Unless action is taken, school students will suffer long-term consequences of the pandemic in the social, economic and emotional spheres of their lives.

To support and amplify school students’ voices, this report calls for urgent, targeted learner-centred policies to ensure that responses to the crisis can address the needs of all school students throughout the pandemic and beyond. Inclusive, accessible, high quality, truly free education for all. School systems that can respond to challenges, future and present, by being bold enough to innovate, while leaving no one behind. Above all, an unwavering political commitment to the inclusion of students in the decision-making processes that will affect their future.
This report seeks to amplify school students’ voices bridging the last two academic years disrupted by the pandemic. It presents the findings of a six-month inquiry of mixed qualitative methods involving over 1,000 students and teachers from different European countries, focusing on the instruction they received, its contents and modalities, students’ overall well-being, and their views on the actions to take in order to “build back better”. It calls for urgent, targeted learner-centred policies to ensure that responses to the crisis can address the needs of all school students throughout the pandemic and beyond.
I believe the 5th of March 2020 was a Wednesday. I was in the library, revising for a science test. But something was off, I don’t know, it’s like there was something in the air - like we were all waiting for something to happen. Then the news came in that schools were shutting down. Everyone stormed out of the library, cheering and clapping, celebrating, they were probably thinking: it’s going to be a few days. I bet many of them regret that first reaction now...that was our last day of school for the year.” (P. 18. Italy)

As P. speaks, his curly brown hair bounces slightly on his head, the sheer mass of it taking up most of the frame. He has a bright light pointed straight to his face and the room behind him is dark. From the other small windows on the screen, a few heads nod. An awkward silence follows - there is no fixed speaking list, so everyone can jump in and add something, but no one does, all too busy looking at other people’s microphone status to check if someone has unmuted themselves to speak. F. takes the floor. The room she’s in is well lit but bare, and the white walls reflect the light into other people’s screens.

And the timing of it. March is a stressful time at school, because all the tests start counting towards the final mark. If you have low marks like I do, it’s the only time to fix it. So you know, I was sort of lagging behind a bit at the time, and to not have that pressure all of a sudden was a nice feeling. I was relieved. It was going to be a week or two before we could go back to school anyway.” (F, 16. Italy)

P. and L. are two of the over 17 million students in the EU who saw their in-person education suspended during the Covid-19 pandemic. In many countries, this was the biggest disruption to education systems since the Second World War. National governments scrambled to contain the virus while attempting to provide sustainable and effective educational continuity. Results were mixed: many territories were caught unprepared due to underdeveloped or lacking physical and digital infrastructure, untrained or aging teachers, slashed budgets and costly tools for digital learning. As policy-makers unveiled measure after measure and researchers polled parents and teachers, the media revelled in social and political commentary. But it was mostly students who had to sit through online classes for over a year - if lucky enough to be able to access it - and it is mostly their future at stake when decisions are made.

This report seeks to amplify the voices of school students across Europe, spotlight their experience and views bridging the last two academic years disrupted by the Covid-19 pandemic. It is based on a six-month inquiry of mixed qualitative methods involving over 1,000 students and teachers from different European countries and diverse backgrounds. By investigating the social and educational situation of secondary school students, the report will aim to demonstrate gaps and contradictions in the current handling of the crisis that need to be addressed. It will show that many of the issues and challenges connected to online learning have been building up in educational systems for decades, and it will provide recommendations to guarantee that education policy in the EU moves in a direction that can address the needs of all school students throughout the crisis and beyond.
1.1. Background

The Organising Bureau of European School Student Unions (OBESSU) is the platform for cooperation between the national school student unions active in general secondary and secondary vocational education in Europe. OBESSU reunites over 32 Member Organisations, national, democratic school students unions in Europe and represents them at European level, to advocate for high quality education for all since 1975.

With many EU countries under lockdown and lengthy school closures, OBESSU and its Members Organisations (MOs) have taken important steps to adapt to the new, largely digital reality: many events and activities were moved online; grassroots networks of solidarity were set up between the various regional branches of the national organisations in a very short timespan; and students representatives from different countries came together to support each other and exchange knowledge on how to carry on their work. In a way, the Covid-19 crisis was an opportunity for school students to reaffirm the importance of pulling together to fight for their right to education, which our report will demonstrate, was not ensured throughout the pandemic. Governments set their priorities: reducing the number of deaths, managing borders, alleviating the pressure on strained public healthcare systems, and protecting the economy. However, a consensus is building that this crisis is and will disproportionately affect young people, if only for the sole fact that they are going to live the longest through its consequences.

The International Labour Organisation (2020) and the European Youth Forum (2016) already painted a bleak picture for youth prior to the pandemic, the latter defining youth as “the group at highest risk of poverty and social exclusion in Europe” (European Youth Forum, 2020:2). With fewer opportunities and welfare safety nets dedicated to young people, cuts to education, a hyper-competitive job market and high levels of early school leaving and youth unemployment prior to the crisis, the situation will not change, but only worsen, without a concrete political and economic commitment. To be able to advocate for school students’ rights in these challenging times means to try and walk in their shoes, take a snapshot of their life experiences and the way the pandemic has affected their learning and opportunities.

This is what we have tried to do with this inquiry. We are not looking for statistical significance or a quantitative approach because we are not numbers. Students are people, and people are complex. We wanted to hear their stories, capture the infinite nuance of their different experiences, views and struggles: a mixed methods, qualitative research approach was deemed to be the most comprehensive and structured way of doing so. The three overlapping streams of inquiry guiding the research project were established in December 2020 by the OBESSU Membership throughout the virtual Council of Members, which is one of the two yearly statutory meetings of the organisation:
What are the students’ perspectives on the COVID-19 crisis in regards to education, and more specifically, on its quality and accessibility?

How is the COVID-19 crisis affecting young people’s everyday lives and those around them, and how are they responding to the situation?

To what extent are young people’s needs and circumstances being taken into account while devising strategies to offset the crisis?

1.2 Methodology

Three main influences guided our approach to research design, data gathering and analysis:

- Fundamental rights approach: School students not as mere “subjects” of research, products or consumers of education services, but as citizens and right-bearers. As such, their right to education is one of many. We aimed to build a methodology that could take into account the diverse experiences and disparities that too exist amongst school students on account of their most fundamental rights.

- Flexibility: the Covid-19 crisis not only is historically unprecedented, but also structurally fast-changing. Re-openings are not forever, and infection rates fluctuate at a dizzying speed, varying their intensity and time-length in different EU countries. It follows that the impact on school students is also everchanging and context-specific. A sustainable approach to our topics of inquiry meant building a methodology that can mindfully integrate temporal shifts with data analysis. We have done so by adopting a multilayered, dynamic approach to the pandemic timeline. Throughout the focus groups, conducted in the month of January 2021, we structured the discussion taking into account different moments in time: the pre-pandemic, the transition to online learning and what was then the “present”, or the end of the first school term of school year 20/21. This allowed us to assess the initial impact of the transition as well as the extent to which some lessons were “learned” after the first few months of lockdown.

- Back to the future: Some might say that the tendency to romanticise the past is universal. We have definitely seen it in action, throughout the desk research, in the literature, in the words of policy makers and the media. Even from some of our respondents. Yet advocating for a more equitable, fair and inclusive future for education means recognising education systems were not perfect prior to the pandemic, either. As the action we take today will hugely impact long term recovery strategies, we cannot afford the solutions to only cater for “the standard” student. The pandemic must be seen as an opportunity to make the right reforms and build more equitable, inclusive education systems.

To paint a picture which could gather insights on all three lines of inquiry while following the leads above, we conducted virtual interviews and focus groups with students throughout the month of January 2021. These served as the first
exploratory step to define the main areas of concern in the inquiry and design an online survey, which was then widely disseminated across our membership and partner organisations.

Focus group participants were drawn from our Member Organisations and partners. Some were school student representatives, others members of the various national student unions or simply students. All were asked to provide some personal information, such as gender, location (urban/rural), type of school, age, country. During the focus groups, discussions were only partly structured, following students' input on a variety of topics connected to the impact of Covid-19: individual struggles and experiences, family situations, relationships, classroom dynamics, views on schools, student unions and governments' handling of the crisis. Discussions lasted for an average of 1-1.30hrs. By the end of January, thirty-one students and teachers had participated in 6 focus groups and 3 interviews, coming from a variety of European countries: Bosnia Herzegovina, Belgium, Czech Republic, Estonia, Finland, Ireland, Italy, Lithuania, North Macedonia, Northern Ireland, Romania, Slovenia, Turkey. There was a relative gender and rural/urban balance, however the overwhelming majority of the interviewees were enrolled in general education. Of the six focus groups, three were organised around national/language lines (Italian, Ireland/UK, North Macedonia) while three saw mixed language/national participation. When possible, the interviews and focus groups were conducted in the participants' mother tongues.

The survey, containing a mix of closed, multiple choice and open questions went online on the 18th of March and closed on the 18th of April. It was made available in 4 different languages: Italian, French, Spanish and English. Over 1,000 students took part in the survey. By gathering data on a relatively large scale for our capacity, we were able to test some of the main ideas coming from the desk research and focus groups.

Most of the analysis starting in the next section is therefore based on 1,021 survey responses from secondary school students aged 12 to 21 years old, with around three quarters of respondents between 15 and 18.

A strong majority of respondents identified as female (70%) while the remaining 30% is split between male (26%) and non-binary (2.3%). The survey was widely disseminated across OBESSU's network of national, democratic secondary school student unions and relevant partners, yet countries differed quite a lot in their uptake, therefore, the geographical distribution of respondents is uneven. Top five countries represented in our survey are Italy (563), Bosnia Herzegovina (116), North Macedonia (94), Lithuania (67) and Belgium (62) accounting for 88% of the total respondents. Other countries include Albania, Austria, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Iceland, Ireland, Lithuania, Luxembourg, Moldova, Northern Ireland, Romania, Slovakia, Slovenia, Spain and Turkey. The majority of respondents are based in rural areas as opposed to urban areas (60% and 40% respectively), while around 14% are from a migrant background - although the proportion varies considerably across countries. Respondents in Belgium, for example, overwhelmingly declared that Belgium is not the country they were born or their family were from (74%). Classifying respondents by their school type
proved to be particularly challenging, as the taxonomy of secondary school options tends to vary considerably across countries. We created an ad-hoc choice of non-mutually exclusive options (Public, Private, Religious, Boarding, VET, Other). This was mainly aimed at capturing trends beyond individual country nomenclatures and to identify, if any, inconsistency of findings across the different school types. An overwhelming majority of respondents are enrolled in public schools (about 96.5%), 15.5% of which are in Vocational Education and Training (VET). The remaining 3.5% is distributed between private schools or “other”. A negligible proportion attends religious schools, both private and public and/or habitually lives on school grounds (boarding).

Table 1: Respondents by age group

Table 2: Respondents by gender
Table 3: Respondents’ distribution in rural and urban areas

![Bar chart showing respondents' distribution in rural and urban areas](chart1)

Table 4: Respondents’ distribution in rural and urban areas - spotlight on BE, BiH, IT, LT and MK

![Bar chart showing respondents' distribution in rural and urban areas for specific countries](chart2)
Table 5: Respondents by background

For the size and skewed distribution both in terms of gender and nationality of respondents, the sample has no pretense of representativeness, neither in regard to individual countries nor from a European perspective. The survey and focus groups sampled together, however, represent the largest pool of EU secondary school students consulted in relation to their education and Covid-19 to date.

1.3 Contributions

Throughout the research, OBESSU could count on the support of its partner and Member Organisations, including a volunteer Task Force (TF hereafter) of school students selected from our Member Organisations. The Task Force met weekly for over three months, supporting the research project in desk research and data collection; giving preliminary feedback on research tools (questionnaires, interview questions etc), dissemination at all stages, translation and outreach. TF members acted as multipliers and deployed their networks to recruit participants and respondents. We also reached out to Civil Society Organisations who are working with particular groups or contexts, to gain a deeper understanding of the additional barriers these were facing. The following is a list of our main contributors.

**ATEE - Association for Teacher Education in Europe** is a non-profit European organisation whose aim is to enhance the quality of Teacher Education in Europe through active dialogue and international exchange of research and practice in initial and in-service teacher education. ATEE provided input on the research methodology and tools, and supported OBESSU in gathering participants for our teachers’ focus group.

**BJV - Bundes Jugend Vertretung** or Austrian National Youth Council is the official and legally established representative body of children and youth in Austria. As such, it advises the Austrian government regarding youth issues, taking part in political negotiations on behalf of young people. BJV exchanged information and
insight from their own research project on the impact of Covid-19 on young people in Austria, including on strategic evidence-based policy recommendations.

**CID - Center for Intercultural Dialogue** is a youth voluntary organisation, based in Macedonia. It promotes intercultural understanding and cooperation, working with young people and citizens from diverse religious, ethnic and national groups. CID supported OBESSU in gathering participants for the macedonian focus group and the survey.

**EDF - European Disability Forum** is an umbrella organisation of persons with disabilities that defends the interests of over 100 million persons with disabilities in Europe. EDF shared survey findings and policy papers from their network regarding the accessibility of digital tools in education for students with disabilities and special needs.

**EuResist** is a nonprofit partnership promoting joint research and scientific projects focused on the study of viruses and infectious diseases. It is in the process of gathering data on Covid-19 transmission in school environments and it supported OBESSU in the gathering of technical and scientific data on disease transmission in schools and on the different responses of the scientific communities around Europe.

**Our Member and Affiliate Organisations**: OBESSU’s network brings together 32 independent, national, representative and democratic Member, Candidate and Affiliate Organisations from 24 countries all over Europe. All of OBESSU’s MOs contributed to the research project by providing their experience and resources produced for and during the crisis, sharing knowledge, information and reports, liaising with OBESSU regarding the changing situation in their respective countries and disseminating our calls for research participants.

### 1.4 Limitations

While this study is, in many ways, unprecedented - the result of a joint effort from different national student unions across Europe, who came together to define priorities and recruit participants from a wide variety of backgrounds - the online nature of the data collection effort presented some limitations. First and foremost, these limitations were dictated by the unequal access to digital tools. During the first consultations with our Member Organisations at the Council of Members in December, student representatives from all over Europe shared with us the challenges they faced throughout the first lockdown. Many mentioned how the unequal access to digital tools was affecting their understanding of the situation, highlighting common concerns amongst researchers, too: the fact that those more in need of support are, for the specific nature of the crisis, also the least able to communicate their needs (Kara and Khoo, 2020).

“Supporting students from disadvantaged backgrounds became almost impossible because of the lack of tools at their disposal.” (R, 19. Belgium)
We did all that we could to ensure representation and inclusion of these students in our research, but the online nature of our survey and focus groups still hindered to a great extent their ability to learn about and take part in our project. Secondly, the language of research (English) proved another barrier for many, especially seeing the age of our target group (12 to 19 years old). Thirdly, the unprecedented nature of the situation made it particularly difficult to create a sample group that could cover and represent such a wide variety of national, regional and local contexts.
This section examines the attitudes and experiences of school students on their education prior to the pandemic. Adding together the positives and negatives of the students’ experience of in-person school was a starting point to look at the different aspects of the transition to digital learning from their perspective, and thus identify the main areas for improvement of education systems in the post-pandemic. For some, the transition to online learning meant a renewed appreciation of in-person school. Others focused on the shortcomings and untapped potential of their learning experience prior to the pandemic.
As we started conducting focus groups, we realised that some of the participants’ backgrounds were wildly different. Students from Estonia, for example, with their state-of-the-art digital learning experience, had little to share with their Turkish counterparts, who at the time of the focus groups, were having but a few hours of contact per week, only in one subject (Maths). Therefore we made sure that each session started with the same questions: “Do you like school? Why or why not?”

By starting from the pre-pandemic, it was easy for students to break the ice and converge on shared, if any, topics of conversation. In terms of our inquiry, adding together the positives and negatives of the students’ experience of in-person school was a useful starting point to look at the different aspects of the transition to digital learning. It was also an opportunity to identify the main areas for improvement of education systems in the post-pandemic. For some, the transition to online learning meant a renewed appreciation of in-person school. Others focused on the shortcomings and untapped potential of their learning experience prior to the pandemic.

2.1 The “human” side of school

“\textit{All things considered, I like going to school. Teachers are interesting, inspiring people. Our student life is also quite lively - we have assemblies five times a month, and we always organise activities like debates, and watching films. So it’s pretty exciting. We have a school newspaper, a theatre course, and we always play frisbee in the school yard.}” (P, 18. Italy)

For many students, the best part of going to school is interacting with their classmates and friends. For some it’s the only good thing about school:

“\textit{I’m not the best student in the world. I do the bare minimum, school for me is my mates, hanging out with them.}” (A, 16. Italy)

Thinking back to their time at school, most people would picture moments like the ones above: the packed assemblies and heated sports tournaments, field trips and museum visits. Welcomed interruptions to the lessons: school staff coming around to announce strikes, closures, or disinfectations; students handing out the school newspaper - the juiciest part of it being the last few pages, where teachers were made fun of and unrequited love anonymously confessed. Extracurricular activities, yard breaks, water bombs. Demonstrations and occupations. \textit{Schools are first and foremost communities, where teachers and students are entwined together in various networks, networks of mutual support, assistance and solidarity.} The benefits of these communities cannot be quantified or measured, but were acknowledged by many in our focus groups and survey:

“\textit{We meet people in our path, students and teachers, who have really a strong influence on us, a positive influence. Obviously it’s not the majority, but some have left a trace on my life on a human and formative level. I learned so much from them.}” (V, 17. Italy)

In this sense then, the social and human side of school is also an integral part of the learning process. We will investigate how this “subtraction” or transition to a
mediated online reality has affected the students’ learning experience in different ways. As we present the findings, we are going to discuss the classroom activities students have described in our surveys and focus groups; the challenges connected to specific subjects; we are going to showcase some of the assignments they received, the way they have been assessed, their relationship and views towards teachers and more. Taking all students’ experiences, both positive and negative, as points of departure, we will give our recommendations to gear the online classroom towards fostering this added value - the more “human” side of school.

2.2 Contents and modalities of teaching

Notwithstanding the positive aspects of in-person education, the students’ attitude towards school prior to the pandemic was also critical. Many of the students we interviewed were very aware that their in-person school had issues way before the pandemic. Some articulated their criticisms in terms of the contents and modalities of teaching, focused on four main issues:

One-way classes: from the physical architecture of the classroom (rows of students facing the teachers’ desk) to the sourcing of teaching content (a book that contains all), most of the elements of the pre-pandemic classroom promote a passive learning experience. Students listen, teachers speak. In the words of one of our participants from Ireland:

“The teaching is focused on making sure that students pass. So teachers don’t engage the students, they focus on the grades, on teaching with the book. Students want to learn, but right now it’s about exams and passing, not learning.” (O, 15. Ireland).

Repetitive homework: if the focus of teaching becomes the bare notions needed to pass examinations and tests, the homework is structured to prepare students for this purpose:

“I didn’t get any interesting assignments [during online education]. It was mostly just regular homework like I would get if I was in school.” (G, 17. Ireland).

Ticking boxes, filling in blanks, retrieving information in a text - this is the uninteresting, “regular homework” assigned to prepare for exams and assessments and obtain the grades required to pass them. While we acknowledge that repetition is an important side of learning, this should be always accompanied by other teaching strategies that make students more involved and proactive in their approach to learning.

Rigid assessments: Assessments are the ultimate embodiment of a system which is often rigid, resistant to change, deterministic and self-replicating in the way it divides students into “good” and “bad”, when it should really be about who has the most stamina to undertake repetitive tasks, or to cope well under pressure. In many education systems, leaving exams, sat in a controlled environment and with a timer, account for over 50% of the global mark for 5 or 4 years of schooling. This assessment methodology too promotes the parroting or regurgitation of information:
"I would like to be assessed on the basis of my work and the effort I’ve put into it, not on basic information that I can tell you as a robot, that’s what I find stupid in our education system.” (G, 16. Czech Republic).

It also creates a moral/legalistic framework whereby seeking information any other place but your brain is seen as “cheating”:

"I do believe that an open-book exam would reflect everyone’s abilities including mine the best, because I think it’s more important to know how to use something than cram the details.” (L, 15. Lithuania.)

Indeed, as Italian scholar and intellectual Umberto Eco once said “erudition is not remembering all the notions, but knowing where to find them” (Bartezzaghi and Eco, 2003).

Outdated curricula: retrieving accurate and up-to-date information is also an issue, as many students in our focus group reported studying with learning materials which are outdated or inaccurate:

"Teachers tell us not to learn from books, because they are not at the level of the students.” (S, 16. North Macedonia).

Established through practice prior to the pandemic, the modalities of teaching and learning described above influenced the ways students and teachers approached the transition to online learning. In some instances, it was an opportunity to create alternatives to the way classes, curricula and activities are normally structured. By discussing the various classroom activities reported by our respondents and investigating the challenges connected to specific subjects, we will give our recommendations to bring about a more participatory, innovative approach to teaching and learning, online and in-person.

2.3 Physical and digital infrastructure

The last two decades of financial crisis and austerity measures have seen a decrease in education funding in many national contexts (Eurostat, 2021). Earlier this year, desk research conducted by OBESSU’s Working Group on Education Funding showed that in selected EU countries², education spending in percentage of GDP is generally lower than the EU average, suggesting that this is mostly affected by a few “affluent” outliers. Funding has also decreased consistently in the last decade following the 2008 economic crisis (Riiheläinen, 2013). Today, schools across Europe remain chronically underfunded, impacting students’ opportunities to learn in facilities other than the standard classroom:

---

² Countries examined: Estonia, Ireland, Italy, the Netherlands, Slovenia, Spain, Sweden.
“The school I go to could have more choices of subjects I guess… It’s not because it’s small or anything, overall I would describe it as…mostly just “disadvantaged”’. We have been trying to get a new school building for the last twenty years. The facilities in our school are not what they’re supposed to be. There’s so many stories of people falling through the floor. One time our roof actually collapsed because it was raining so much, we had rats in the lower ground floor classrooms.” (O, 15. Ireland).

“There’s no gas in any of the labs, there was mold growing on one side of the school which then had to be evacuated, it was dangerous to be in there… so there’s a section of the school you can’t go to or you will get sick.” (L, 18. Ireland).

The first to decay is the physical infrastructure. Without maintenance and renovation, students and teachers are at risk of physical harm. The failure to keep up with technological standards means that many students cannot benefit from learning facilities such as gyms and labs. Out of the 1021 students who participated in our survey, only 48 of them mention that the lack of facilities was an issue in online learning, suggesting that in many schools, there was no adequate infrastructure and facilities to support learning prior to the pandemic.

Interviewer:

“What would you say is the first thing that you need to learn at your best?”

S, 16. North Macedonia:

“Practical learning for certain subjects, like chemistry, instead of learning with books only. Our school does not have a lab.”
In this section, various aspects of the digital transition are framed and assessed through analysis of the focus groups and survey data, with a double focus on quality and accessibility of education: digital and physical infrastructure needed to ensure resilient education, barriers of access experienced by our respondents and their peers, challenges and best practices in teaching and learning modalities, including teachers’ skills for digital education and assessment methodologies. It features OBESSU’s recommendations to ensure that the learning needs of students are addressed in the long, medium and short term.
We had a brief look at some of the most common topics that the students in our focus groups mentioned while discussing in-person school. Now we turn to analyse the ways in which the digital transition impacted the students’ pre-existing views, conditions and experiences of learning.

3.1 Physical vs digital infrastructure

Decaying physical infrastructure posed significant threats to the safety of students prior to the pandemic. Covid-19, however, shifted attention away from the “harder” physical infrastructure towards the digital. While digitalisation was discussed for years in the European educational policy environment as an area in urgent need of development (European Commission, 2013), not all Member States adopted concrete or effective measures to enable schools to provide education through or assisted by digital tools. Evidence from the literature and supported by our focus groups shows that students in countries where the digitisation process was already under way prior to the pandemic encountered less difficulties in accessing digital education:

“In Estonia, we are actually really happy, we are one of the flagships of the digitalised EU I guess, most of Estonia currently has the internet. We have a system where all textbooks are digitised, teachers can give us exercises and everything, so even if we don’t have classes, we can still be assessed. We use a software called Opiq.” (T, 17. Estonia).

“The Covid-19 emergency definitely put some steam into the [Romanian] government’s plans to enhance digitalisation in education...which was practically non-existent up to that point! It was just nice talk by politicians.” (R, 16. Romania).

Yet to see and brand countries as either winners or losers of digitalisation is misleading. Ireland is, on paper, a digitalisation winner: in Huawei’s Global Connectivity Index 2020 it is rated 18th, 5th in the EU (Huawei, 2018). Its school system enjoys a widespread positive reputation abroad: Irish students ranked 3rd in Europe and 8th globally in OECD’s PISA assessments of 2018 (OECD, 2019). In terms of education funding, teachers in Ireland enjoy better pay than their counterparts in many EU countries: the statutory starting annual salary for teachers in Ireland is about USD 36,600 across all levels of education in public institutions - 2% higher than the OECD average in upper secondary education, 7% in lower secondary education and 11% in primary education (OECD, 2019b). Yet rural areas in Ireland routinely report bad connectivity; representatives from the Irish Second-Level Student Union (ISSU) denounced a systematic lack of funding for infrastructure development in schools and transport systems (ISSU, 2021). Even within apparently well-faring countries, disparities remain in the allocation of resources at regional level.

“I would do meetings for school, but the internet is very bad in Bosnia. Sometimes teachers have to text students to give them homework because of bad connection. If you live outside the city, you can’t do online school.” (D, 16. Bosnia Herzegovina).
As we briefly mentioned before, investment in infrastructure cannot be seen in terms of the purely digital. This testimony from a student in Southern Italy illustrates how physical infrastructure also poses issues in terms of safe school reopenings:

“I am lucky compared to the other schools around here, because we have spacious classrooms and corridors, so we could go back [in September 2020] in safety, with all the precautions, and still hang out together.” (A, 16. Italy).

To make schools Covid-19 proof, massive infrastructural investment is needed to reduce the risk of transmission in the school environment - air circulation and filtering systems, bigger classrooms. Within our sample, around a third of students felt unsafe with the social distancing measures adopted by their schools. This increased to 39% for students in blended learning or in person education at the time of the survey:

Table 6: Effectiveness of safety measures from the students’ perspective

![Bar chart showing effectiveness of safety measures for all learning types and in person/blended](chart.png)

The ability of individual schools to provide a safe return to face-to-face instruction varies and this can result in asynchronous school closures and openings in the same areas, as some are more likely to report cases or clusters if the social distancing measures are not respected.

In many cases a staggered approach to learning hours has been adopted to ensure students can come back to school regardless of the state or capacity of their school building. “Staggered” entry times means that different groups of students start and finish classes at different times, like 8.00am-12.00pm and 10.00am-2.00pm, to avoid crowding inside and outside of the school building. Yet, there are factors external to the school that increase the risk of coming back to school: on the territory, public transport might be unreliable or scarce resulting in longer commute times, or it could be so overcrowded as not allowing socially-distanced travel. In some cases, the different entry times planned for the staggered school return did not match the transport available on the ground:
Interviewer:

“...You told me you like political science. Is there anything about the government response you would have done differently?”

G, 16. Italy:

“...Speaking of the latest, I would have not gone for staggered entry times. That is maybe a solution for cities where there’s buses passing every 10 minutes, but in small villages and rural areas, transport links are not there. Two of my classmates, for example, need to leave their village at 7.30 to get the bus to go to school. They arrive at 8 and have to wait two hours outside of school for their entry time, in the rain and in the cold... not everyone has parents who can drive them to school at 10am or pick them up at 3pm.”
Digital and Physical Infrastructure - Our Recommendations

The EU and its Member States must learn from the crisis to build resilient national education systems. They must put in place disaster mitigation strategies for the education sector, consulting and involving learners and representatives of the educational sector in decision making processes and allocating sufficient funds. The EU should develop a platform for coordination and collaboration that could bring together experts from different fields and countries working on the creation of crisis mitigation strategies applicable to different contexts.

Amongst all the lessons learned from the pandemic, we would like to draw particular attention on the following issues:

School closures should be considered a last resort, not the standard solution to adopt when cases rise in a certain area, region or country. While the safety of students and teachers must be a priority, in no case school closures should be an opportunity NOT to think of alternative solutions to ensure quality educational continuity. In many EU countries, restaurants and malls opened before schools. Education is a human right, shopping is not. Ensuring educational continuity at all levels should be a top priority of all EU countries and it should come before shopping centres.

Massive infrastructural investment is needed to reduce the risk of transmission in the school environment: bigger classrooms, air ventilation and filtering systems. The unequal allocation of funding to schools that has been documented prior to the pandemic must be addressed to reduce the long-term impact of the crisis on already existing inequalities.

Going forward, the way funding is allocated and for what is going to be a crucial part of the Covid-19 recovery. It is also going to be an opportunity to fix a flawed system. As the example of Ireland demonstrates, the unequal distribution of resources is a threat to the recovery of education systems post-Covid. Funding needs to be transparent and intervention needs to effectively address the needs of individual schools and territories. In no case funding should be allocated on the basis of students’ test scores and performance or by competition, as this sets impossible expectations for schools without the adequate facilities, human resources or logistical apparatus to compete with better-funded schools.
3.2 Barriers to access

The barriers to accessing quality education operate on a micro level, too. For years OBESSU has investigated the hidden costs of public education. The data available on the subject for the EU is scarce, especially on the gap between existing mitigating policies (like subsidised school books and materials) and their practical application at the grassroots. In the UK however, a strong public awareness of existing inequalities prompted research by charities and governmental organisations. These provide an overview of the challenges of accessing quality education. Parents’ income and circumstances appear to be a strong determiner. Parents with higher paid jobs and degree qualifications are more likely to have time and the ability to support their children in their learning (Montacute and Cullinane, 2021). They are also more likely to invest in private tuition. In the context of Covid-19, students who can benefit from private tuition have a considerable headstart on their peers, as it has been remarked by some participants in our focus groups:

“In Turkey, we have a national exam for senior students at the end of the last year of school. Before Covid-19, many students used to pay private tutors to prepare for it. It was tough for them because they had normal school plus tutoring. Now with Covid-19, normal classes are suspended, so those who have private tutoring are the ones who continue to study.” (D, 15. Turkey).

On the contrary, parents who do not speak the language of instruction or parents in lower paid jobs are less able to support their children. Living close to or below the poverty line does not only mean less support in the learning, but is often synonymous with poor living and housing conditions - like lack of heating, food and overcrowding. Last year, Premier League footballer Mark Rushford exploited his celebrity status to raise funds and awareness on the issue of free school meals. Under lockdown, his charity scheme provided food to over 3 million “free meals” school children - children whose only meal of the day used to be provided for free by their schools (BBC, 2020). The fact that similar data is not publicly available or even an item in the current debate on education in EU countries does not necessarily mean that the issue does not exist.

Building synergies with grassroots organisations facilitates research design and implementation. Speaking to students about the difficulties they face in online class, we attempted to structure the survey in a way that could capture their home learning environments. Three factors were taken into consideration: Internet connection at home, own personal device (such as laptop or tablet), access to a personal space (i.e. own room). These factors can, to an extent, clarify the conditions in which students are learning, as compared to the in-person classroom environment: internet connectivity is a prerequisite for accessing most learning platforms; an individual, non shared personal device is a prerequisite to remain online for the whole duration of the class. A personal space is preferable as it can help minimise unwanted noise or distractions.

Within our sample, a third of students do not have all three; and 5% had access to an internet connection only. This without taking into consideration the nature of our
survey (online) which undoubtedly posed barriers to uptake. Here is a breakdown of the students’ necessities for online access in our sample, excluding the majority who declared to have all three:

Table 7: Tools used for online learning by survey respondents

<table>
<thead>
<tr>
<th>Tool</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual personal computer</td>
<td>32</td>
</tr>
<tr>
<td>Internet connection</td>
<td>55</td>
</tr>
<tr>
<td>Own room</td>
<td>9</td>
</tr>
<tr>
<td>Personal computer, own room</td>
<td>6</td>
</tr>
<tr>
<td>Personal computer, internet connection</td>
<td>185</td>
</tr>
<tr>
<td>Own room, internet connection</td>
<td>15</td>
</tr>
</tbody>
</table>

Evidence from our focus group partly complements this data: of the 26 students we spoke to, all had noticed the “disappearance” of at least two of their classmates, with some reporting up to six missing students in their classroom. Participants mentioned that a few of their classmates are not joining online learning classes. This suggests that the number of students with limited or no access to the online classrooms is much higher. “Disappearance”, as one teacher described, is when:

“Students keep their camera off and mic off all the time, they don’t interact, when they ask questions, you don’t know how much they have heard or understood. They’re like ghosts. You can tell that most of them are following the classes on their smartphone, because they don’t have anything else.” (P, 43. Italy).

“Some students completely dropped off and didn’t attend online classes and those were sort of the same students who would only occasionally come to school so I guess that’s not a big surprise... but then there’s some who were doing well in school and now find it very difficult, it’s a lot of stress and pressure. There is definitely a group that has fallen out, not because of their own choice, but for lack of access and support. For example students who are asylum seekers and may have access to education under normal circumstances but not during lockdown.” (A, 17. Ireland).

A report published by the Joint Research Centre of the European Commission in 2019 highlights the connection between household income and migration status. In EU countries such as Greece, Spain and France, between 45 per cent and 55 per cent of children of migrants live in relative poverty, twice the rate of poverty among children born to non-migrant parents (Schumacher et al, 2019). Refugee
children and children seeking asylum are often detained or confined to designated structures where their right to education is, de facto, violated. According to UNICEF, only 10 Member States explicitly recognise the right of undocumented children to basic education. An additional five states explicitly exclude them from free schooling (UNCFRO, 2016). This is a violation of Article 26 of the Universal Declaration of Human Right and the Convention against Discrimination in Education. In addition, it is in direct contradiction of the first principle of the European Pillar of Social Rights, according to which “Everyone has the right to quality and inclusive education, training and lifelong learning in order to maintain and acquire skills that enable them to participate fully in society and manage successfully transitions in the labour market.” (European Commission, 2017)

If not addressed, the exclusion of refugee children and children seeking asylum from the education system will have long term consequences on the fabric of our societies perpetuating racialized, generational inequalities comparable to those of ex-apartheid states.

As we have demonstrated throughout this section, accessibility of education is not only defined by tools and income. There are also other ways in which exclusion operates in education - in the way school systems have not always been welcoming of and catering for all learners. Consider these qualitative insights from our survey:

“... I would prefer school to be online even after the pandemic only to avoid the embarrassment connected to the fact I am trans and I have social anxiety.” (S, 14. Italy).

“My Macedonian is not so good, my teacher asks for a lot of details and she asks questions that are too hard to answer for me.” (A, 16. Macedonia).

Consider also this excerpt from the European Disability Forum report on Covid-19 and inclusion in schools:

“Distance learning was provided to most students, but the majority of platforms are not accessible and no differentiation has been taken into account to respond to the special educational needs of students.”

Looking at the measures adopted by specific EU countries, EDF found that the online schooling measures and materials do not cover the needs of students with disabilities in Austria, Belgium, Czech Republic, Estonia, France, Germany, Greece, Ireland, Portugal, Sweden and Switzerland (Drakopoulou, 2020). This raises the alarm on an underreported but crucial issue amongst high, medium and low income EU countries alike on the lack of research, development and consultations in regard to inclusive and accessible education for students with disabilities and special needs.

Finally, many barriers to access in education existed prior to the pandemic and they were only exacerbated, or made visible by the current crisis. The erasure or neglect of difference - whether in terms of sexual orientation and gender expression, background or abilities - perpetuates exclusion. Exclusion fosters disengagement and contributes to Early School Leaving. In 2019, the EU was on track to reach its target of bringing ESL below 10%, with rates resting at 10.2% (European
Commission, 2019). The added challenges of the pandemic for learners from disadvantaged or marginalised backgrounds, together with their prolonged lack of contact with schools and classmates can considerably set back this achievement and compromise the latest gains in the democratisation of education in the EU. In a report by the Comité des Élèves Francophone (CEF) on online education in Belgium, 1 out of 6 students considered themselves at risk of dropping out, and 1 out of 10 parents deem their children already in the process (CEF et al, 2021).
Barriers to Access - Our Recommendations

Key barriers to online learning that emerged during the first wave remained unaddressed during the second wave. Learners who didn’t have access to the appropriate equipment and internet connectivity or who didn’t develop independent learning skills to work remotely were again excluded. The EU should further support national education systems to ensure accessibility to all learners, irrespective of their background, ability, gender and financial means.

The transition to digital education created new necessities which constitute an additional barrier for families who were already struggling to provide their children with all the necessities of in-person school. In EU countries like Italy and Spain, school necessities are not always subsidised by the state: stationery, uniforms, school books. Governments should ensure that they can provide to individual schools all learning materials necessary to the education of their students, online and on site.

A handout model (subsidies in cash to buy digital tools and data) is not always preferable: from now on, the right to education will rely on the availability of digital devices and internet connectivity on the side of students and family, and this needs to be easily accessible, reliable and continuous. For e-learning platforms, zero-rating websites can provide a solution to guarantee total access, because they can be used by students without the need for data and/or internet connection (Trucano, 2016).

The EU and its member states should develop a common framework to investigate education inequalities and barriers to access to ensure that their education systems are truly for “free”. This common framework should foresee the involvement of Student Unions, Youth Councils and other relevant Civil Society Organisations operating at the grassroots and focus on measuring the impact of mitigating policies already in place. This is in the scope of EU bodies such as the Fundamental Rights Agency and the Education and Training Monitor, who could provide more resources and data, on a more regular basis, on the topic of inequalities in and barriers to education.

Students should not be learning in an unregulated digital environment (Invalsi, 2021). Schools must clearly lay out internal rules which are fit to address the challenges of in person, online and blended learning environments, in terms of conduct, inclusion and administrative procedures such as roll calls and absences, use of webcams, etc. These should be co-created with students and their representatives through consultations to ensure that the issues and concerns of students are properly addressed. Additionally, the European Digital Education Hub could be used to develop sustainable solutions and alternatives to combine online and offline learning.

Schools should be catering for all learners, but at present, many students experience exclusion. Some of the students more at risk of ESL are those who experience stress because of their financial and home situation, even more so in the online classroom. If we want to keep the gains made in reducing rates of Early School Leaving in the EU, it is fundamental to address the structural inequalities at the root of exclusion in our
education systems. A first step benefitting all groups of students who are at present marginalised would be to guarantee free access to digital tools for all students.

Students with disabilities or special needs, who do not have the support or tailored tools to access the digital classroom, should be able to access specialised support. The European Digital Education Hub could serve to develop online learning tools that take into consideration their specific needs. Similarly, second language students who struggle with the language of instruction should be able to access free language support within and without the classroom.

LGBTQI+, migrant and ethnic minority students often face discrimination in the classroom and at home. For their safety and well-being, and to ensure they too can thrive, the content and modes of instruction should be able to cater to all students equally - actively educating students and training teachers in anti-discrimination and anti-racism.

When it comes to asylum-seeking children, it is absolutely necessary to recast the Reception Conditions Directive of the EU and prohibit minors’ detention. They should be hosted in children facilities or in reliable host families. Asylum-seeking children should have access to education systems on the same terms as children born in the country. Undocumented children living with their families in the EU also experience significant challenges to access education such as documentation requirements to enroll in schools, lack of funding for non-EU nationals children or parents’ fears of deportation. We call on EU member states to simplify the administrative requirement and ask education institutions to protect these children from police controls.
3.3 Learning losses

When discussing what, precisely, has been “lost” in the transition to online learning, students and teachers mostly speak of the immersive, human school environment. Policy makers and governments, in turn, refer to more concrete “learning losses” - the loss or reversals in academic progress amongst those in education or training. Learning losses are a core concern for policy makers because of their long term implications for global and national economic growth. To address the issue of learning losses, schools and governments have adopted different approaches towards introducing new learning content throughout the pandemic. During the first lockdown (March - May 2020) some EU governments, such as Belgium, for example, delegated the decision making on curriculum progress to individual schools. Some of these, in turn, have opted to suspend all new learning content, with adverse effects not only on students’ academic progress but also on their motivation. In the words of a student from Bosnia Herzegovina:

“I was very unhappy with the system when we were online. All we did was do our homework and get grades. No new topics, zero explanations. I was an A grade student in second grade and kept the same grade in third grade, but I didn’t do anything new. I have learned nothing.” (D, 15. Bosnia Herzegovina).

In some contexts, the opposite happened. To make up for learning losses, students’ hours of online contact progressively increased, with adverse effects on motivation, attention span and stress levels of students and teachers:

“The online transition was messy, sure, but was also lighter, we had less online classes because teachers understood that it was counter productive to spend too many hours in front of the screen - it was more fitting to the situation...unlike now, when we have 5-6 hours of class a day.” (F, 17. Italy).

Within our survey, of those who have six hours online or more during an average day of class, 69% believe that is too much class time for an online setting. The highest scoring average class time is 4 hours per day with 74% of the students deeming the amount of hours appropriate:
Regardless of their source - lack of instruction or pace and amount too intense - identifying and addressing learning losses in the most effective way will require extensive research and mapping by educational providers and other stakeholders in education.

### 3.3.1 Subject specific challenges

Evidence from our survey suggests that challenges of teaching and learning online are often subject specific. 52% of the 403 students who answered the question “What are the most difficult subjects to teach online, and why?” believe the hardest subjects to teach online are STEM subjects (Maths, Physics, Chemistry, Biology,
etc), followed by practical subjects (for example Physical Education, or for VET students, woodwork, metalwork, etc) and the Humanities. For some, the nature and specific requirements of subjects are not as relevant as the teachers’ skills to deliver instruction online, hence the category “All subjects”; others chose the challenging subjects in terms of their own abilities and main interests, hence the category “Mix of subjects”:

Table 10: Perceived level of difficulty of online teaching per subject

<table>
<thead>
<tr>
<th></th>
<th>STEM</th>
<th>Humanities</th>
<th>Practical</th>
<th>Mix of subjects</th>
<th>All subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived</td>
<td>52.2%</td>
<td>9.2%</td>
<td>12.1%</td>
<td>17.1%</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

For STEM subjects - which many students found just as challenging online than in person class - the main challenges reported are the complexity of the topics taught, the lack of useful explanation and opportunity to be followed closely by teachers throughout the learning to clarify doubts:

Table 11: Challenges faced by respondents in learning STEM online

“Biology and Chemistry are hard, because the teacher struggles to understand if we understood the concepts or not, the attention decreases quickly and the lesson pace is very fast. In other theoretical subjects, too, I struggle to keep my focus at all times, so it often happens that I miss some big chunks for lack of focus.” (F, 19. Italy)

“I find Maths and Physics very hard due to the lack of time for questions and inability to practice more with the professor.” (I, 17. Bosnia Herzegovina)
For what concerns practical subjects, the main challenge is the lack of facilities to practice under supervision:

**Table 12: Challenges faced by respondents in learning practical subjects online**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>No explanation/follow up</td>
<td></td>
</tr>
<tr>
<td>Personally difficult</td>
<td></td>
</tr>
<tr>
<td>Pace too intense</td>
<td></td>
</tr>
<tr>
<td>Teacher’s issues</td>
<td></td>
</tr>
<tr>
<td>No focus</td>
<td></td>
</tr>
<tr>
<td>No facilities</td>
<td></td>
</tr>
</tbody>
</table>

Discussing P.E. in particular, students lament the lack of indoor space and report that teachers have mostly been focusing on theory. While few reflect on the importance of physical activity, some students mentioned their participation in and appreciation for activities like bike rides and workout videos as part of their remote P.E. curriculum:

“**The most fun homework I had to do during lockdown was a video of me juggling for P.E.**” (G, 16. Italy).

“**I really enjoy doing assignments outdoors, because in a lot of school activities I have to sit and do work online...**” (L, 16. Lithuania).

“**The assignments I am enjoying the most are the ones for P.E. because that’s the part of the day I can finally go out of the house and enjoy nature and also mentally turn-off for at least one hour a day.**” (D, 18. Czech Republic).

For what concerns the Humanities, the lack of dialogue seems to be an issue for many students who believe the **content of instruction cannot be taught without a discursive component - discussions, debates and collective reasoning:**

“**History and Philosophy are unbearable online. They are reduced to reading a book quicker and quicker, there is no discussion.**” (T, 17. Italy).

“**For Philosophy it was really useful to reason together in person, while now the teacher speaks and we take notes.**” (E, 16. Italy).
Practising foreign languages also poses challenges online:

“I study three languages and pronunciation, lexicon and conversation are very hard to perform online. You can’t hear properly, you miss bits and pieces of words and teachers are not always willing to repeat them.” (G, 17. Italy).

“My spoken English and French are getting worse, because I do not talk as much as I am used to. During language classes I am always very glad when we are divided into breakout rooms.” (N, 16. Czech Republic).

Students manifested appreciation for the writing of essays, debates, discussion of current affairs, the making of videos, in-depth “research”, creative and collaborative activities (like role plays, group work, presentations), all of which can provide opportunities for students to engage actively with the ideas and concepts proposed in the curriculum:

“I think the most engaging assignment I got was in Geohistory. We had to confront our constitution with that of ancient Athens. Another one was a presentation for Religion in which we had to present a biblical character and a painting referring to an episode of their life. This is how I found out my passion for art.” (V, 14. Italy).

“Debates are real fun.” (A, 17. Italy).

“My teacher organised a “literary breakfast” in June 2020. Each student needed to select one or more foods connected to a book we read. It was an actual breakfast where we were all eating and trying to find out what books other students’ breakfasts were inspired by.” (E, 15. Italy).

“I probably most enjoyed one assignment of Social Sciences where we had to come up with a marketing strategy for a fictional product.” (M, 16. Czech Republic).

This last point in particular suggests that as much as they can be treated as conceptually different categories, “hard” learning losses - reduced or halted academic progress - and “soft” learning losses - lack of social and human interaction in the classroom - should be considered as partly overlapping categories when it comes to online learning.
Subject Specific Challenges - Our Recommendations

The most reported problems by students learning STEM subjects online were connected to the complexity of the topics taught and the lack of useful explanation and face-to-face support. The following are some recommendations for the teaching of STEM: invest in and develop gamification of STEM, allocate time for follow up and questions, record classes to allow students at all paces to catch up in their own time, foster students’ curiosity by connecting the learning content to world events.

Sports and P.E. have very positive effects on students, as they themselves report, even more so during lockdowns and school closures, when most of the learning happens at home. They are also a fundamental step in creating and promoting a more sustained culture of well-being in both means and practices of our education systems. Schools should always be able to provide students with an appropriate choice of outdoor activities regardless of closures and restrictions, to enhance their mental and physical well-being and counteract the negative effects of a sedentary lifestyle.

The biggest issues faced by students in the learning of Humanities (Literature, Geography, History, Philosophy) is the passive teaching methods and the pace and amount of instruction being too intense. Humanities teaching should always involve discussion, collective reasoning and other discursive practices so that students can engage actively with the ideas and concepts proposed in the curriculum, such as: writing of essays, debates, discussion of current affairs, the making of videos, in-depth “research”, creative and collaborative activities (like role plays, group work, presentations).

Overall, innovation in both content and methods of teaching should be promoted to make sure schools can cater for different types of learners. Education should provide students with tools and approaches to navigate society: critical skills to fight the rise of fake news, multilateral thinking to adapt to different environments, research skills to make the best of the information age, self-management skills to thrive in higher and further education. To do so, the content of teaching must be in constant dialogue with the world students live in; methods should be open and collaborative - unstructured time, project based learning, feedback sessions are only a few examples - to enable teachers and students to support each other in the classroom.
3.4 Methods of teaching and learning

As we have mentioned above, the approaches to teaching and learning online varied largely within our sample, not only from country to country but in some cases from school to school, or classroom to classroom. The only constant throughout was the use of technology, which provided a place-space for students and teachers interaction. Before we delve on to discuss some of the specific issues of teaching and learning online, we want to provide some insight on the online environment in itself, as seen by the students in our survey and focus groups.

“Spending many hours in front of a screen makes my head hurt.” (E, 15. Italy).

During online learning, around 96% of our respondents have experienced a range of effects attributed to prolonged exposure to screens:

Table 13: Perceived most common effects of prolonged screen time on respondents

<table>
<thead>
<tr>
<th>Effect</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye soreness</td>
<td>75%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>75.3%</td>
</tr>
<tr>
<td>Lack of focus</td>
<td>70%</td>
</tr>
<tr>
<td>Sleeping issues</td>
<td>65%</td>
</tr>
<tr>
<td>Posture problems</td>
<td>68%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

The most common adverse effects reported in relation to screen time were eye soreness (75%), fatigue (75.3%), lack of concentration (70%) and posture problems (68%). The lack of concentration or inability to focus is also discussed in terms of opportunities the online environment presents for distraction:

“There are so many distractions online, it’s really hard to concentrate.” (T, 18. Bosnia Herzegovina).

All the students in our focus groups and around 76% of survey respondents declared that it is common for them to disengage from online class if this is too boring, or complicated:
Table 14: Disengagement rate of respondents with content perceived as boring or challenging

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>771</td>
</tr>
<tr>
<td>Disagree</td>
<td>127</td>
</tr>
<tr>
<td>No opinion</td>
<td>110</td>
</tr>
</tbody>
</table>

Seeing the intersection between the effects of prolonged screen time and the quality of attention online, we believe that these effects of the online environment should be taken into account as environmental factors affecting the amount and pace of instruction that is possible to conduct online. This is to say that instead of threatening or encouraging students to maintain their attention span, it should be recognised that the online environment poses challenges in terms of methods of teaching and learning which need to be part of the solution instead of adding on to the challenges of online school.

The prolonged, negative effects of screen time, together with a sense of individual frustration or inability to maintain the attention contributes to the anxiety and stress students feel in online school. Taking these into account, we now turn to examine some of the methods of teaching and learning in the online classroom as reported by our focus group and survey participants.

### 3.4.1 Project-based learning

"I think they [teachers] should try and find new tools and ways that make the learning more interesting. Not just the usual way, get in front of the camera and start talking." (A, 16, North Macedonia).

Teachers and students alike quickly became aware of how one-way teaching in the online classroom results monotonous and heavy. In the quest for more dynamic forms of classroom teaching and learning, some of our respondents’ teachers have relied on project-based learning. We understand project-based learning as the assignment of projects, presentations, individual or group work to which students can contribute more than notions or solutions. Project-based learning (abbreviated PBL) has positive effects on students’ learning experience and can help foster transversal skills such as team work, self-management, critical skills and communication. It is also a way to make education more inclusive as it can
accommodate different types of learners (Almulla, 2020). Our findings show that students appear to have generally positive yet mixed attitudes towards project-based learning:

Table 15: Respondents’ attitudes towards project-based learning

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project-based learning makes learning more interesting and engaging</td>
<td>33.5%</td>
</tr>
<tr>
<td>Project-based learning becomes dull if teachers don’t account for the time it takes to complete tasks</td>
<td>57%</td>
</tr>
<tr>
<td>None of the two</td>
<td>10%</td>
</tr>
</tbody>
</table>

33.5% of respondents think project-based learning makes online activities more interesting and engaging. A further 57% acknowledges that project-based learning is useful but also feels that teachers do not properly account for the time it takes to complete tasks. Curiously enough, a few teachers in our focus groups understood online learning as more productive in terms of curriculum covered and assignments completed. While some students agreed, they also do not necessarily equate productivity with high quality or in-depth understanding of teaching content:

“Projects and activities might enhance productivity, but they don’t make online school that much more bearable.” (L, 16. Italy).

There is also another way of interpreting this data: students feel like they do not have enough time to complete a task because they are learning as they go. Indeed, familiarising with new platforms and apps, planning and conceptualising content, trying out multiple alternative options, reviewing, finalising a product are skills which are not necessarily fostered through passive frontal lessons and repetitive homework. Students, therefore, might lack the skills to thrive in these activities.

### 3.4.2 Homework

The students’ perception of project-based learning as too time consuming might also be connected to their general attitude towards homework and assignments. This was one of the most burning issues amongst students in our focus groups and survey: since the beginning of the pandemic, the volume of workload and assignments has increased dramatically, with a negative impact on learners’ motivation and well-being.
“Teachers think we have more free time, when actually there isn’t much of a difference, it’s still six hours sitting in front of a computer, and they kind of overload us with work.” (G, 15. Italy).

“Some teachers are making it very stressful for us. We have interrogations and tests everyday with a huge workload.” (F, 15. Italy).

“I want to learn how to play guitar, read an interesting story, and maybe watch a film, but I can’t because I have tons of homework to do, that’s not good. Having that much work, most students started to have big anxiety, issues with trusting themselves or others.” (D, 15. Lithuania).

“I put in my effort, but I don’t know if I will pass. The homework isn’t too hard but there is just so much of it.” (S, 17. Belgium).

“The main problem in online learning for me is really that there is too much homework. Teachers think we can do it; the students don’t agree.” (S, 16. North Macedonia).

Over 50% of our survey respondents think the workload is too heavy; a further 14.2% describe the homework in absolute negative terms (boring, repetitive).

Table 16: Perception of respondents regarding the amount of homework assigned

<table>
<thead>
<tr>
<th></th>
<th>Appropriate</th>
<th>Excessive</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>25.8%</td>
<td>56.6%</td>
<td>17.6%</td>
</tr>
</tbody>
</table>

Table 17: Students’ perceptions regarding homework assignments

<table>
<thead>
<tr>
<th></th>
<th>Negative</th>
<th>Positive</th>
<th>Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>70.8%</td>
<td>20.9%</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

Apart from the students’ perception, there are no accurate quantitative indicators to measure how much the workload has increased. We can nonetheless remark that with reduced opportunities for leisure and social interaction during lockdown, students have found it extremely difficult to remain motivated. Other negative effects of the increased workload were anxiety and stress, mentioned by over 70% of respondents as one of their main sources of worry during the pandemic.

To understand more about the ideas behind students’ concepts of “good” and “bad” homework, we asked them to tell us about their favourite assignments during online learning. Only 11% of students answered this question with a concrete assignment;
a further 2% mentioned that they did not enjoy any assignment done online since the start of the pandemic:

“While I appreciate my teachers’ efforts to make the class less boring and repetitive, no assignment online ever made me feel engaged. The best times are when I get bored and I read my astrophysics book, draw mandalas or chat.” (V, 15. Italy).

We believe the number of students who did not have any interesting or engaging assignments to be much higher, however, as demonstrated by the low uptake of this question. We codified the students’ assignments as creative (create a video, write an essay), research (autonomous research into one topic, finding information online), group work, interactive (presentations, debates, quizzes and polls) and current affairs:

Table 18: Type of enjoyable assignments for students according to respondents

<table>
<thead>
<tr>
<th>Type of Assignment</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative</td>
<td>40</td>
</tr>
<tr>
<td>Research</td>
<td>30</td>
</tr>
<tr>
<td>Groupwork</td>
<td>20</td>
</tr>
<tr>
<td>Interactive</td>
<td>10</td>
</tr>
<tr>
<td>Current affairs</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
</tr>
<tr>
<td>None</td>
<td>30</td>
</tr>
</tbody>
</table>

Other positive practices remarked by students were variety, dynamism and lecture planning. While the categories above are not mutually exclusive, they do point at a specific direction in terms of priorities for teaching in the digital classroom, sometimes identified by the students themselves:

“The best homework we get in my opinion is the one that asks us to interpret information and is not limited to monotonously applying notions.” (R, 16. Italy).

“The assignments I enjoyed while doing online learning were the ones who required individual research and imaginative writing.” (A, 17. Romania).

We believe that students have valuable perspectives on the skills they need to thrive in the 21st century. Governments, schools and teachers should promote a collaborative approach while devising teaching methodologies, curriculum design, priority and goal setting for the future of education. A first step in this direction would be to provide teachers with the skills and tools they need to improve the current quality of online education.
3.5 Teachers’ skills for online teaching

“All that I know about digital teaching I learned alone. I didn’t know a lot before. It was hard work.” (M, 47. Croatia).

At the beginning of this report, we mentioned that school systems were mostly unprepared for the transition to online learning. We also demonstrated how this lack of resilience and adaptability was connected to austerity measures and cuts to education systems across much of the EU. In the literature on Covid-19 and its impact on education, however, the unpreparedness of school systems was often connected to the teachers’ lack of specific skills to navigate the online classroom. We argue that much of the teachers’ lack of skills for online learning is to blame on the systematic neglect of their needs and rights as workers: lack of support and guidance, little to no paid and quality Continuous Professional Development, precarious and underpaid working conditions. Therefore, improving teachers’ working conditions is a prerequisite for effective upskilling and teachers’ training. So far, discussions on teachers’ training at the EU level were mostly framed in terms of hard digital skills: logging onto a computer and managing online platforms, assembling PowerPoint presentations and finding materials and resources for teaching (European Commission, 2021). Discussion in our focus groups, however, helped us highlight an equally pressing challenge, namely, the teachers’ ability to engage students in the digital classroom:

“I feel like many of our teachers just dump information onto us, without promoting discussion. They don’t know how to make the class engaging.” (A, 18. North Macedonia).

“After all of this I strongly feel that the most important criteria deciding whether online education works or not is the teacher’s willingness to actively seek and adapt to feedback from students. If a student feels that the teacher won’t change their ways, they will be apathetic to the subject and won’t bother to respond to a passive aggressive ‘just tell me why are you all so lazy during my lessons?’” (M, 18. Lithuania).

Recognising that good quality education is more than just a smooth and reliable internet connection and a basic understanding of Google Classroom (or other learning platform), we asked students in our survey to estimate teachers’ abilities in two aspects: digital skills and pedagogical skills. By pedagogical skills we mean the skills needed to turn teachers into inspiring mentors for their students: the ability to moderate and foster discussion and critical thinking; to stand up for students who are vulnerable to discrimination and bullying; to elicit curiosity and accommodate different learners and their learning styles; to be responsive to feedback and generally promote a culture of learning which is not just coercive or threatening, but positive and collaborative. In an unprecedented situation such as this, we deemed the most fundamental of all pedagogical skills to be the teachers’ ability to demand and incorporate students’ feedback - on the quality of the explanation provided, on the class format or evaluation method adopted. The idea behind it is that students’ input and experience of online learning should be a primary concern in trying to devise strategies for effective and engaging teaching in these circumstances.
In terms of digital skills, only 13% of students deem all of their teachers fully competent in the use of digital tools for teaching. For roughly the same amount of students (12%), only few or none of their teachers are able to navigate the digital classroom. The majority of our respondents were situated somewhere in the middle:

Table 19: Respondents’ perception of teachers’ digital competences

<table>
<thead>
<tr>
<th>Perception</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>All fully competent</td>
<td>138 (13.64%)</td>
</tr>
<tr>
<td>The majority</td>
<td>419 (41.40%)</td>
</tr>
<tr>
<td>At least half</td>
<td>333 (32.91%)</td>
</tr>
<tr>
<td>Few or none</td>
<td>122 (12.06%)</td>
</tr>
</tbody>
</table>

If these numbers seem daunting, teachers’ ability to give and receive feedback scores even lower according to the students in our sample. For over 30% of students, very few or none of their teachers “are understanding and open to feedback, listening to students’ needs and opinions, and trying to support them in their learning”:

Table 20: Respondents’ perception of teachers’ pedagogical competences

<table>
<thead>
<tr>
<th>Perception</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>All of them</td>
<td>127 (12.57%)</td>
</tr>
<tr>
<td>The majority</td>
<td>301 (29.80%)</td>
</tr>
<tr>
<td>At least half</td>
<td>264 (26.14%)</td>
</tr>
<tr>
<td>Few or none</td>
<td>318 (31.49%)</td>
</tr>
</tbody>
</table>

The interaction between these two suggests that students are more likely to perceive their teachers as able to use digital tools than they are to deploy pedagogical skills in their teaching:
Table 21: Comparison of teachers’ perceived pedagogical and digital competences

Therefore, if teacher training is to be a flagship investment within digital education development in the EU, it should be coupled with a strong intervention to improve teachers’ pay and working conditions. It should also be focused on providing teachers the skills to support students online, including pedagogical skills.

“...I started playing music as I wait for students to join the class. They don’t want to miss it, so they always come on time.” (S, 43, Turkey).

Indeed, teachers cannot only be seen as dispensers of education and pedagogy, as empty vessels to fill with innovative skills. Teachers too are human beings who, like students, faced many challenges during the pandemic. Providing them with tools and training for online and blended learning will require at least a partial understanding of their circumstances. Our focus group with teachers was fundamental to understand how the current situation of teachers can affect students, as participants shared their experiences of teaching online and in person during the pandemic. Many teachers worked extra hours to reach out to their students and assist those who are marginalised because of their learning needs:

“...One of my students has ADHD. He always sends me very long emails after class, giving feedback, telling me what he enjoyed. I make sure I always get back to him. During the pandemic in particular, students need to feel seen.” (T, 50, United Kingdom).

“...I voice record all of the [written] documents and materials for one of my students who has a visual impairment.” (E, 27, Turkey).

Students too acknowledged their teachers’ effort to motivate them and check up on them throughout the lockdown:
In my school, a teacher checks up on students individually, once a week. I think that’s smart, because some people don’t want to share in front of the whole class. Speaking only with the teachers they shared their problems, like family members who were sick.” (C, 18. Finland).

I think scientific subjects are harder to teach because if you miss one thing you’re lost. I was struggling quite a lot [with Maths] because my parents were doing remote working next door, my teacher understood that and really pushed me with the learning.” (V, 17. Italy).

As a consequence of these additional tasks, teachers in our focus group reported an overall increase in the workload. They also incurred in costs related to distance learning such as but not limited to: essential home working equipment (laptop, internet connection, tablet, whiteboard), e-learning apps (many, such as Mozaik, Whiteboard and Wooclap are not for free) and health issues (ergonomic chairs, specialised visits for problems of sight and posture). Being considerably more at risk than their students of contracting a severe or deadly Covid-19 infection, teachers also manifested anxiety at the thought of going back to school:

With the fear of the pandemic, especially during the first lockdown, when everybody was scared they’d get Covid, it was a big relief to have to work from home. It was a privilege to be able to. It is easier to rationalise at the beginning, you can find ways to be safe and isolate yourself. In the long run however, you have to start taking risks, and the fear becomes part of you. You go to work, you are scared, you are in class, you are scared. You know only the precautions you have taken yourself, but you don’t know about anyone else’s. So the thought is always there in the back of your mind. I know some people who have been affected. Some of them are dead. Some of them are alive but not fully well. A colleague of mine who I have known for twelve years passed away. When it’s a colleague, you know, in my profession, you see them every single day. For twelve years. He was fit the last time I saw him. No day passes where I don’t remember him.” (T, 50. United Kingdom).

The constant stress of putting one’s life at risk at work adds to the other sources of stress mentioned above, namely prolonged screen time and fatigue, increased workload and an increased sense of responsibility towards students. The latter aspect in particular has been highlighted by students in our focus groups in relation to the uncertainty around end-of-year assessments:

Teachers are frustrated because the government is not keeping them informed on how exams and grades will be decided. They don’t know more than we do. How can you prepare students if you don’t know what you are preparing them for?” (O, 15. Ireland).

I really think that some of the overload of work we have seen depends on the uncertainty around exams...teachers are trying to keep all options open, because they don’t know what the future will bring. So they bombard students with work to prepare them for whatever the government will decide: in person exam, virtual exam, continuous assessment...” (C, 18. Ireland)

We will deal more in depth with the topic of assessments in the next section.
3.6 Assessment methodologies

Prior to the pandemic, the majority of EU countries relied on one form or the other of mostly written but also oral examinations to be taken in a controlled environment to measure the specific competences acquired by individual students before leaving secondary school. The content of the written examination followed the competences as outlined in the standard national curriculum; the results were used to determine partly or fully a given student’s ability to obtain a school leaving diploma. In some countries (i.e. Ireland and France), examination marks directly impact the students’ access to higher education, as they are used by universities for selection (Hoareau McGrath et al, 2014). The pandemic has severely disrupted end-of-year assessments across Europe. In many cases, long-established evaluation methodologies were suspended. This sparked (or reignited) debates on examination methodologies, amongst students, between students and teachers, policymakers, governments, researchers and practitioners. What should students be assessed on? How should they be assessed?

“I don’t think it is fair to expect students to do the exact same test at home they would have done at school.” (K, 17. Estonia).

“It would be fair to do a test for all subjects at the beginning of next year, 2021/22.” (L, 17. Italy).

“I think it is fair that people repeat the year if necessary, but the psychological and overall situation of a person needs to be taken into account.” (A, 18. Italy).

“It would be fairer to be assessed on a personal competence path and not just based on the content of the curricula.” (V, 18. Italy).

As these quotes demonstrate, there isn’t so much consensus amongst the students in our sample on the specific competences and methodologies for assessment, as much as there is a common framework to understand end-of-year examinations - a moral framework, concerned with “fairness”.

The same could be said for government and policy-makers across the EU, just in slightly different terms.

During the pandemic, final, controlled evaluations were scrapped or postponed (Sharma, 2021). They were replaced by either a purely numerical continuous assessment (aggregated marks from assignments for each subject throughout the year) or with some combination of mark averages and qualitative factors (for example, effort in class, personal situation, or teachers’ decision). This was motivated by a twofold concern with “fairness”. On the one hand, the “controlled” aspect of the evaluation was made impossible by the home-based, online learning system: to carry out final exams remotely would have meant to give implicit permission to students to “cheat” by looking up information online or asking the support of a parent or friend. On the other hand, seeing the huge diversity of responses to the crisis and the unequal access to digital tools for students, teachers and families, the “standard”
examination was no longer seen as viable as it would not grant all learners with the same opportunities. **We hope that so far we have managed to demonstrate how these obstacles were always there for certain groups of students.**

We asked students in our sample information about the way they have been evaluated in the year 2019/2020 (the methods used, the results obtained and the impact on their future opportunities) and on how they would want to be evaluated for their efforts in the future. The majority of those who replied to the first of these questions (around 50% of the sample) were assessed with continuous assessment:

**Table 22:** Type of end-of-year evaluation reported by respondents in 2019/2020 school year

- Continuous assessment
- Final exam/s
- Mixed methods
- Other type
- In person school marks, only or privilege
- Quality judgement and/or personal experience

<table>
<thead>
<tr>
<th>Type of Evaluation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous assessment</td>
<td>210</td>
</tr>
<tr>
<td>Final exam/s</td>
<td>21</td>
</tr>
<tr>
<td>Mixed methods</td>
<td>52</td>
</tr>
<tr>
<td>Other type</td>
<td>44</td>
</tr>
<tr>
<td>In person school marks, only or privilege</td>
<td>32</td>
</tr>
<tr>
<td>Quality judgement and/or personal experience</td>
<td>162</td>
</tr>
</tbody>
</table>

Some answered this question by giving quality judgments about their performance in the exams or the perceived fairness of the examination methodologies used:

**Table 23:** Perceived performance of end-of-year evaluation reported by respondents in 2019/2020 school year

- Marks better than previous year, or good
- Marks same as previous year or average
- Marks worse than previous year or bad
- Unfair methods
- Fair methods

<table>
<thead>
<tr>
<th>Perception of Performance</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marks better than previous year, or good</td>
<td>55</td>
</tr>
<tr>
<td>Marks same as previous year or average</td>
<td>27</td>
</tr>
<tr>
<td>Marks worse than previous year or bad</td>
<td>38</td>
</tr>
<tr>
<td>Unfair methods</td>
<td>23</td>
</tr>
<tr>
<td>Fair methods</td>
<td>10</td>
</tr>
</tbody>
</table>

Looking ahead to higher and further education, **an overwhelming majority of respondents in our survey think that the pandemic is going to negatively affect their future opportunities.** Over 600 students in our survey have applied to university this year, and 88% of them think the pandemic has negatively affected their university application:
Table 24: Respondents’ perception of own preparation for final exams

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>123</td>
<td>449</td>
<td>424</td>
</tr>
</tbody>
</table>

Table 25: Respondents’ expectations of impact of Covid-19 on their future

<table>
<thead>
<tr>
<th></th>
<th>University application</th>
<th>General</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td>No opinion</td>
</tr>
<tr>
<td></td>
<td>79</td>
<td></td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>574</td>
<td></td>
<td>237</td>
</tr>
</tbody>
</table>

Some of the students in our sample mentioned that their in-person marks were made to count more than the marks obtained during remote learning. With the current emphasis on continuous assessment and the students’ reported homework overload, we advise caution when developing continuous assessment methodologies. Additionally, if continuous assessment is based on the marks obtained through repetitive, notion based homework and assignments, it will only further the current tradeoff of notions and skills, which is remarked at length by our respondents:

“Writing down information that I have to memorise is boring and I don’t remember anything after the test. On the other hand, if I have to make a presentation, find information and somehow teach this information to my classmates, I understand what I am talking about and I remember it for a longer time. I think this is the way. Make students understand the information instead of memorising them.” (D, 16. Czech Republic).
I would like to be assessed based upon my efforts, and my learning achievements, not how much I can stuff in my head and then spit back out.” (P, 18. Austria).

The entire school system is built on us listening and parroting back information. I don’t feel represented in this learning method.” (L, 17. Italy).

As we have demonstrated throughout this report, students are skeptical about the current education systems’ possibilities of equipping them with the skills and competences they need to thrive. This includes exam methodologies primarily because the means and content of testing are directly connected to the content of instruction and the type of notions (and values) this fosters. If the teaching methods do not encourage the development of learning-to-learn and autonomous learning skills - which are fundamental in higher and further education - why would a student’s mark reflect their ability to thrive in further and higher education? Just as students dream of a different curriculum and more engaging, less passive teaching methodologies, they would want this change to be reflected in exam methodologies, too.

Table 26: Respondents’ preferred assessment methods

- Oral examination
- Continuous assessment
- In-person assessment and exams
- Teachers decision and/or evaluation of efforts
- Other mixed methods
- Reasons and insights
- Doesn’t know

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral examination</td>
<td>22</td>
<td>66</td>
<td>28</td>
<td>54</td>
<td>55</td>
<td>45</td>
<td>20</td>
</tr>
</tbody>
</table>

On the one hand, the graph above exemplifies some of the main changes students would want to see in how they are assessed: targeted support over measuring performance, an attention to individual paths and circumstances as opposed to “one-size-fits-all” assessment methodologies, and a focus on skills instead of notions. On the other hand, the very little uptake for these questions (less than a third of the sample) suggests that students do not feel qualified or informed to discuss assessment. This might mean that students do not know or understand on the basis of what they are being assessed and with what methods, which is problematic insofar as it signals once again how little agency students have towards shaping their day-to-day reality and, in the long term, their future.
Methods of Teaching and Learning - Our Recommendations

At the EU level, the following considerations should be taken into account while developing the Council Recommendation on blended learning for primary and secondary education, and should also be taken into account by the Commission’s Expert Group in charge of developing guidelines for teachers and educators to foster digital literacy and tackle disinformation through education and training.

Screen time has some serious repercussions on students’ and teachers’ physical and emotional well-being, as well as on their capacity to focus and stay motivated. Students too should have the “right to disconnect” and online school hours should be planned to avoid students spending more than 4 hours a day in front of screens.

Some of the skills necessary in project-based learning might need to be taught or made explicit instead of merely assigned. Our findings suggest that some of the important skills needed and enhanced through project based learning, like summarising and structuring information, planning and researching topics - skills which rarely feature in one-way, notion-based classes - need also to be a focus or topic of teaching, and not just assigned as homework to complement the learning.

The fact that students have less opportunities to be outside or socialise does not necessarily mean that they have more hours to dedicate to homework, and a different approach to assignments must be adopted throughout the pandemic and beyond. An approach that values homework as opportunities for students to learn more and to consolidate their skills and competences, discover their passions, engage with the subject matter, promoting in-depth understanding instead of favoring repetition and mindless assimilation of notions.

Prior to the Covid-19 pandemic, education systems could have used a change: one way classes were the norm even though they were widely seen by students as tedious, rigid and ineffective. What made the model tolerable was the wider physical and social school environment students were immersed in. In a post-pandemic world, it is evident that these changes are no longer an option, but a necessity. Teachers need the skills to navigate the digital classroom and these should include pedagogical notions, to make lessons palatable and useful to their students, and moving from oppositional to collaborative approaches. Particular attention should be devoted to aging teachers who struggle the most in upskilling digitally.

Practices such as interactive lessons as well as collaborative approaches to learning are fundamental tenets of non-formal education. Non-formal education providers have also pioneered digital pedagogy way before the Covid-19 crisis. Fostering partnerships between formal and non-formal education providers can benefit the mutual exchange of practices to improve the quality of online, digital, collaborative teaching and learning (Eurydice, 2019).
Much research has been conducted in the last decades on online teaching methodologies and approaches (i.e. computer supported collaborative learning). Before embarking on new research, findings from past inquiries must be harnessed and operationalised to support teachers in their training and upskilling, both in terms of hard and soft skills.

The challenges teachers overcame and the ones they are still facing are a rich knowledge repository - an asset that should not be overlooked when determining the best practices and teaching modalities in online learning. These are only some of the actions which could support teachers in their work in the short, medium and long term:

- Covering costs for internet equipment and connection
- Training (as mentioned above) within working hours and/or paid
- Free access to learning apps and e-platforms
- Accounting for the extra hours (financial support and compensation for the remote work) or overall salary raises in countries where teachers are underpaid (i.e. Belgium, Bosnia Herzegovina)
- Assistance and support for learners with special needs (human resources)
- Occupational health and safety (including psychological support)

National governments need to develop a resilience plan for school assessment, with a clear protocol in case of suspended face-to-face learning which guarantees all students can be evaluated taking into account their individual circumstances. Students and teachers should be aware of the modalities of these alternative forms of assessments and these should not require extra work or preparation on the side of either students or teachers. This “emergency/contingency plan” should be just as efficient and effective as the original “standard” assessment procedure.

In no case students should be denied access to further and higher education because of their lower-than-required marks obtained in the last two years, seeing the effects of educational disruption on the schools’ abilities to provide students with quality education.

Continuous assessment should not mean constant testing. Not only this has been reported by many students as a source of stress but it can also foster disengagement if online marks are valued less than those obtained in-person, as students see no tangible reward or acknowledgment for their efforts.

Overall, assessments should be rethought beyond the Covid-19 contingency. Methodologies should move away from measuring performance towards truly seeking to support students in their learning. Students should be able to learn from their mistakes and not be penalised for them. Their efforts should be recognised in line with their individual learning path. Students should also be more involved in the decisions made in regard to assessment as in some countries these are necessary qualifications to access higher and further education opportunities, as well as further training and job opportunities for apprentices and VET learners.
This section presents the research findings concerning students’ mental health and well-being in the context provided by previous analysis. It examines respondents’ outlook towards the variety of issues and challenges of lockdown, isolation and online learning, including the students’ main sources of worry, and the mechanisms put in place to cope with them. Across topics, the importance of inclusion and representation of young people in decision making processes concerning their lives is emphasized as a way to regain agency and improve their overall well-being. Recommendations are provided to ensure that the emotional and physical needs of students are addressed while devising strategies to offset the crisis.
Online school is not just only online classes - it is also not seeing your friends and schoolmates, spending all the time at home with your family...sometimes they are supportive but sometimes they just aren’t.” (A, 16. Bosnia Herzegovina)

It is now widely acknowledged that the pandemic and consequent restrictions on in person activities impacted the well-being and mental health of people across a variety of countries and backgrounds: the isolation and loneliness of lockdown, the grief, for those who passed away, or the fear of becoming infected or losing loved ones to Covid-19, the widespread uncertainty about the future. In our survey and focus groups, we have asked students about their outlook on their future, themselves and their ability to solve problems, their main sources of worry and their ways of coping with them. Our findings suggest that levels of well-being amongst young people were low prior to the pandemic, and that the crisis exacerbated some of their main worries and anxieties, especially towards the future.

4.1 Contributing factors

Teenage years are years of discovery, discovery of oneself and one’s body, discovery of others, discovery of social norms and constraints. School students are going through a challenging age in life. The pandemic has brought on additional challenges. In the day-to-day, the increased screen time and its negative effects on health and motivation; increased workload and stress of online learning; cancellation of exams, for which students in some cases prepare for years; the uncertainty and isolation; the forced cohabitation with parents and guardians and the awareness that younger people are more likely to infect vulnerable others than being ill themselves. Throughout the crisis, a narrative of the irresponsible, Covid-spreading youth to blame for rising case numbers was paired with a tacit understanding that students’ right to education is not a government priority. All the above considered, it is not surprising that many students in our survey have seen their well-being worsen significantly during the pandemic.

“Before the pandemic I was an extrovert, but with the quarantine I’ve been feeling very self critical and not confident at all so now I’d rather just stay inside. I’ve also become more sad and anxious”

As a starting point to gather more insight on our respondents' well-being, we asked them to self-assess their outlook on a scale from 0 to 5 in regards to three items: their future opportunities, their self esteem and their ability to solve problems. The 0 to 5 refers to the frequency of the positive feelings, where 0 is never, 1-2 is rarely, 3 is sometimes and 4-5 often or always:

Many students rarely feel positive about their future, self-esteem and their ability to deal with problems
We can see that many students rarely feel positive about the three areas of inquiry, namely their future, their self-esteem and their ability to deal with problems. The average numerical score is 2.4 on a scale of 5 and it is about 0.4 lower for female students and non-binary participants. Only about a tenth of our sample reported feeling often positive and optimistic, so around 116 out of 990 respondents for these questions. Particularly stark is the widespread, negative feeling about the future experienced by our respondents.

4.2 Sources of worries

“Everybody is supportive, family, teachers, friends. I just feel exhausted by worrying for me and everybody around me.” (M, 15. North Macedonia)

We did not only want to know about students’ overall outlook but also about the most common sources of stress and worries they experience. In the focus groups, many students did not feel comfortable discussing their personal issues with complete strangers. Yet they touched on some issues that we codified and submitted as part of our survey, to be able to assess wider trends:
The first, overwhelmingly reported cause of worry for students is stress at home or at school:

“School is overwhelming.” (V, 18. Austria)

“I’m not feeling well! I’m stressed about the exams at the end of the school, and while we are still online and learning nothing...I will completely fail the exam.” (A, 18. North Macedonia)

Experiencing stress at school means preparing for years for school leaving exams, only to see them cancelled, and replaced by new methodologies; it means feeling like the amount of time in a day is not enough to go through repetitive, endless, hellish tasks and homework; it feels like not knowing where, and how to turn if you need help and support. With the increased isolation and the stress of schools, students are more likely to acquire negative feelings connected to themselves, their appearance and their self-worth. The second most common cause of worry is appearance or weight. This percentage is higher amongst female and non-binary students:
Stress affects students not only mentally, but also physically, in many different ways. As we already mentioned when introducing the digital classroom environment, the effects of prolonged screen time are detrimental to physical health: posture and sleeping problems, pain in the eyes, a general sense of fatigue. Certain students have admitted to having developed unhealthy eating habits (both restrictive and excessive):

"The only thing that helps to calm down after panic or stress attacks is binge eating. But that makes me feel awful because I gained a lot of weight and I don’t even feel like myself. Mostly everyday I catch myself in moments when I feel like I’m drowning or I’m standing on a table or in a room full of people and I’m screaming like hell and nobody hears me.” (G, 17. Lithuania).

Some others fell ill with Covid-19 and still experience symptoms after months:

"I got infected with Covid in school even with a mask and got really sick for 2 weeks. Now I still suffer from fatigue and concentration problems which is a real struggle because my exams will soon take place. To be honest I am angry because I am vulnerable and didn't get the medical attention needed. I feel neglected by doctors because my pain is still not taken seriously. And I feel as well neglected by school because I needed to go even though I knew there were a lot of infections in school.” (B, 20. Luxembourg).

But while these are the most common issues, they might not be the most worrying ones. Twenty percent of our respondents have financial worries and 19% of them have become or already were the carers of a family member. These numbers raise the alarm on the particular barriers of those who have high-risk relatives and students from disadvantaged backgrounds, for whom detaching from the physical school environment might lead to unskilled or unpaid labour:

"My mum suffers from mental illness, so it is kind of difficult. When I feel anxious, the breathing exercises really help me.” (E, 18. Czech Republic).

Table 29: Respondents’ attitudes towards their weight or appearance by gender

<table>
<thead>
<tr>
<th></th>
<th>Not a source of stress and/or worry</th>
<th>A source of stress and/or worry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female/non-binary students</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>Male students</td>
<td>600</td>
<td>800</td>
</tr>
</tbody>
</table>
In school we do have psychologists, but they don’t do anything at all. I think 95% of students don’t even know that we have psychologists in school. Asking to turn on your camera sometimes really hurts students, because some have little brothers or sisters who are running in the background, or for example searching for something, or your room just doesn’t look as beautiful as the others, and you feel not okay with that.” (V, 15. Lithuania).

Many students have to go through all of these issues on their own. Over a third of the students in our sample feel like they have no one to turn to:

“I just felt depressed because I have no one to talk to.” (J, 15. Lithuania).

### 4.3 Coping mechanisms

Our inquiry was not the first to investigate the negative impact of the pandemic, especially on young people (Skripkauskaite et al, 2020; Day et al, 2020; ASPIRES, 2020). This is why we wanted not only to focus on the students’ issues and specific sources of stress, but we also wanted to hear from them about the strategies they put in place to cope with the situation. Based on the focus groups and interviews, we provided students in our survey with a multiple choice question with the following coping mechanisms or strategies. Here is a breakdown of the results:

**Table 30: Respondents’ coping strategies and responses to stress**

<table>
<thead>
<tr>
<th>Coping Strategy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pursuing hobbies, passions</td>
<td>600</td>
</tr>
<tr>
<td>Spending time outdoors</td>
<td>400</td>
</tr>
<tr>
<td>Being proactive in solving problems</td>
<td>200</td>
</tr>
<tr>
<td>Support from friends</td>
<td>100</td>
</tr>
<tr>
<td>Support from family</td>
<td>600</td>
</tr>
<tr>
<td>Limiting time online</td>
<td>300</td>
</tr>
<tr>
<td>Spending more time online</td>
<td>400</td>
</tr>
<tr>
<td>Meditation</td>
<td>200</td>
</tr>
<tr>
<td>Other</td>
<td>200</td>
</tr>
<tr>
<td>Using drugs or alcohol</td>
<td>100</td>
</tr>
<tr>
<td>Practicing self care</td>
<td>600</td>
</tr>
<tr>
<td>Volunteering</td>
<td>600</td>
</tr>
<tr>
<td>Therapy/counseling</td>
<td>0</td>
</tr>
</tbody>
</table>

Despite reporting diminished time for passions and hobbies because of the heavy workload, students still find solace in dedicating themselves to activities that passionate them:

“It is very important to have time for yourself, to do something we love everyday.” (L, 18. Bosnia Herzegovina).
I don’t really talk about my feelings, so I express my thoughts with art.” (H, 17. Bosnia Herzegovina).

They also appreciate spending time outdoors, whether for sports or for other types of leisure:

Spending time in nature or by doing sports helps me to clear my mind after tiring online classes.” (M, 16. Lithuania).

Many students have expanded on their previous answers in the open section, where they provided more details about the ways in which they have regained a sense of purpose and agency, mainly through relationships with friends and peers:

I felt supported in situations when I realised that many others around me are dealing with the same problems like me and we can find solutions together.” (S, 15. Bosnia Herzegovina).

I surround myself with positive and honest people that help me go through almost everything.” (E, 16. Bosnia Herzegovina).

It was mostly through the open question at the very end of the survey that students had the possibility to go into detail on their life and situation, on the challenges and obstacles they faced. Some were positive; others were less able to cope with the circumstances of the pandemic. Many expressed their inability to cope with negative feelings, their sadness and in some cases, a need to access counseling services. As highlighted by the graph above, a negligible percentage of students relied on therapy or counseling to improve their well-being. The issues with access to counseling services are not only framed in terms of actual service provision (so how many councillors are available in schools) but also in terms of finances and privacy:

I felt and still feel bad because I overthink everything. I don’t think there is any help for me at this point” (G, 16. Bosnia Herzegovina).

I would like there to be more in person or online, face-to-face services available for young people to access for free. There is a severe lack of mental health services available for young people to access without going to a doctor with a parent.” (C, 17. Ireland).

I wish someone checked up on me.” (B, 13. Lithuania).

I would have liked having access to free psychological support.” (M, 20. Spain).

Therapy isn’t affordable.” (N, 16. Austria).

Sometimes, all it takes to make it better is ask:
The pandemic has always been an opportunity for me to do more hobby stuff or spend time with my family. But recently, maybe in the last 2 weeks, I began to feel depressed for the first time in my life. I haven’t seen my boyfriend, the best human I’ve ever met for more than a month. I’m afraid of losing him and my friends as well. Thank you for this important question, now I feel much better after telling my problems.” (E, 17. Austria).

We hope that by asking the right questions at the right time, many more of the students we consulted and interviewed felt heard, seen and understood.
Students’ Well-being - Our Recommendations

At the EU level, the promotion of mental health should be seen as a fundamental element in the development of quality inclusive and resilient education systems. The EU should foster and support national initiatives aiming at improving the mental health of young people, especially those facing inequalities.

To reduce the economic and political marginalisation of young people, it is necessary to strengthen their participation in decision making, at all levels: national, regional, local, within and without the school. **School students need to be actively involved in the decision making concerning their lives, to have an opportunity to improve their condition within society and discover and exercise their agency, both individual and collective.** They should be provided spaces and services for free, where they can be together, discover their passions and learn from each other such as youth and community centres, sports facilities, libraries.

Enabling and keeping up channels of communication as much as possible between the students can help them come together and overcome their struggles. Unstable communication leads to isolation, and when students feel more lonely, their overall well-being worsens. **More time and more spaces should be dedicated to youth, both online during school and offline, and the approach to well-being should allow for more community-based forms of counseling, like interest and peer groups.**

Going to school should never cause students stress - whether related to their performance, their relationship with teachers and classmates or the workload. Normalising stress is dangerous because stress has severe consequences on both physical and mental health. Action must be urgently taken to reduce the stress school students feel: first of all by taking direct action on the issues raised in this report which are identified as stress sources (like workload, teaching and learning methods and assessment methodologies) but also by developing awareness raising initiatives; school frameworks of stress prevention; and by equipping teachers with the skills they need to recognise stress in themselves and others through training.

Many respondents in our survey have shared their problems, worries and anxieties which are either exacerbated or the direct result of the pandemic. To support students in this difficult time, mental health services and counseling in schools should be provided for free and protected by privacy, so that students can access support without unwanted intrusions from their teachers and parents.
This report has presented the experiences and views of over 1,000 students across Europe in the context of educational disruption caused by the Covid-19 pandemic. It provided information on pre-existing ideas and views of the school systems prior to the pandemic, the challenges and opportunities of remote and blended learning as experienced by our respondents, as well as on their mental health and well-being throughout the crisis. In this final section, we draw our conclusion based on the evidence and set the priorities for the post-pandemic recovery of education systems throughout Europe.
It feels of the utmost urgency to draw some conclusions, based on our findings and our journey since this project started. It appears to us that a lot changed during this pandemic, but many things did not change. Education is even less accessible than before. Cuts to the public sector in the last decades contributed to stagnating methodologies, underdeveloped facilities and more precarious working conditions for teachers. This made it so that school systems in most of the EU were not prepared to guarantee digital learning for all students. Contributing to the distress, impotence and uncertainty experienced across the board by young people is the fact that their needs and circumstances were seldom taken into account while devising strategies to offset the crisis. In some cases, their right to education was subordinated to the opening of bars, restaurants and malls. More recently, youth has been put at the very end of the vaccination line, yet, as these lines are written, media outlets rage about the inevitable next wave caused by young people traveling for the summer holidays. It is a losing game: as a result of school closures and educational disruption, young people will suffer long-term consequences of the pandemic in the social, economic and emotional spheres of their lives.

Additionally, they have little or no control over the way they are portrayed; their spaces for achieving change, or expressing dissent, are curtailed every day. No wonder youth do not feel positively towards the future - the narrative that elevates young people as its makers sounds like shallow rhetoric; it might be matched by a vague political commitment to empower them, but no concrete effort in listening to what they have to say. A recent example is the development of National Recovery and Resilience Plans (NRRPs) as part of NextGenerationEU - the largest single investment in the history of the European Union - which saw little to no involvement of students and other educational stakeholders (ESU et al, 2021). Yet students, who are living this crisis, on their skin, in the classroom, everyday, have a lot to say. We have sought to showcase and motivate some of it in this report. The student unions in our organisations and beyond represent thousands of students in their respective national contexts, where they fight for their rights to political representation and their space in decision-making. They constitute, in many ways, students’ first opportunity for collective organising. Throughout the Covid-19 emergency, they have mitigated the effects of the disruption, becoming focal points for information, queries and concerns of students; starting campaigns to protect students’ rights and improve their condition, to bring their voice to the tables where decisions are taken. Their demands are clear. Inclusive, accessible, high quality, truly free education for all. School systems that can respond to challenges, future and present, by being bold enough to innovate, while leaving no one behind. Learner-centered economic investments, aimed at improving education systems to benefit and protect those who inhabit them in the everyday. Above all, a willingness to see students as valuable stakeholders and contributors to make all of this become a reality. Because **no truly meaningful and effective decision-making about us can be taken without us.** If the Covid-19 emergency is an opportunity to “build back better”, we cannot afford to look back three decades from now and see that this opportunity too has been missed. We need long-term solutions, and the space to enact them - truly democratic school systems where students have a say in the policies directly impacting their lives and futures; where students can acquire the skills they need to change the world for the better, for all.
LIST OF REFERENCES

Almulla, M.A. (2020). The Effectiveness of the Project-Based Learning (PBL) Approach as a Way to Engage Students in Learning. SAGE Open, 10(3).


European Youth Forum, (2014). Youth in the Crisis. What went wrong?


ANNEX 1: LIST OF TABLES

Table 1: Respondents by age group
Table 2: Respondents by gender
Table 3: Respondents’ distribution in rural and urban areas
Table 4: Respondents’ distribution in rural and urban areas - spotlight on BE, BiH, IT, LT and MK
Table 5: Respondents by background
Table 6: Effectiveness of safety measures from the students’ perspective
Table 7: Tools used for online learning by survey respondents
Table 8: Hours of online contact per-day and students’ perception
Table 9: Hours of online contact in AT, BE, BiH, IE, IT and LT
Table 10: Perceived level of difficulty of online teaching per subject
Table 11: Challenges faced by respondents in learning STEM online
Table 12: Challenges faced by respondents in learning practical subjects online
Table 13: Perceived most common effects of prolonged screen time on respondents
Table 14: Disengagement rate of respondents with content perceived as boring or challenging
Table 15: Respondents’ attitudes towards project-based learning
Table 16: Perception of respondents regarding the amount of homework assigned
Table 17: Students’ perceptions regarding homework assignments
Table 18: Type of enjoyable assignments for students according to respondents
Table 19: Respondents’ perception of teachers’ digital competences
Table 20: Respondents’ perception of teachers’ pedagogical competences
Table 21: Comparison of teachers’ perceived pedagogical and digital competences
Table 22: Type of end-of-year evaluation reported by respondents in 2019/2020 school year

Table 23: Perceived performance of end-of-year evaluation reported by respondents in 2019/2020 school year

Table 24: Respondents’ perception of own preparation for final exams

Table 25: Respondents’ expectations of impact of Covid-19 on their future

Table 26: Respondents’ preferred assessment methods

Table 27: Respondents’ feelings and their frequency

Table 28: Sources of worry and stress among respondents

Table 29: Respondents’ attitudes towards their weight or appearance by gender

Table 30: Respondents’ coping strategies and responses to stress