

Learning Loss and Educational Inequalities in Europe: How is Europe Overcoming the Impact of the Pandemic

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1. INTRODUCTION

For 15 years, Europe has been facing a series of fundamental crises, starting from the 2007/8 financial crisis, the Euro crisis of 2010, the migration crisis of 2015, the COVID-19 pandemic in 2020, to the most recent one, the Russian war on Ukraine. The detrimental effects – on politics and the economy – of those staggering and still unsolved crises have been widely discussed.¹ One sector, however, did not receive the kind of attention it should deserve due to its strategic importance for the future of each society: the education system. Between March 2020 and spring 2022 millions of young Europeans were locked out for months from all kinds of educational and para-educational institutions and activities. Hardly any challenge could be greater than not only minimising the negative impacts of the pandemic on the future of the next generation but also putting the “investment into education” at the core of Europe’s recovery policies.

The following article will start with insights into the situation of the European education sector since the first wave of COVID-19 hit the continent in the late winter of 2020. It will further critically reflect on the measures taken by the local, federal, national, and European institutions to counter the negative impacts on the young generation. Out of this analysis, some recommendations will be drawn for coping with future crises in the education sector. The term “education”² is used in a broad sense, covering institutionalised forms of learning from kindergarten to university and beyond. Due to their important contributions to the development of young

1. Among many see, e.g., Ivan T. Berend. 2017. *The contemporary crisis of the European Union: prospects for the future*. Abingdon, Oxon; New York, NY: Routledge.

2. The term “education” is used differently in different languages, comprising a variety of formal and non-formal measures and processes to support the physical and psychological development of children and young adults.

people³, the diverse world of extra-curricular institutions such as youth work and sports activities is also taken into account.

Many problems of the current education systems in Europe are *not* the result of the COVID-19 pandemic or the countermeasures taken. They are deeply rooted in earlier political decisions and societal developments, and often have been known for decades but have not been properly addressed and corrected. Whether the experience of the last two years will help policymakers to courageously turn the wheel and address those erroneous trends must remain open for the moment. Given the diversity of the European education systems, the article doesn't aim at a comprehensive and detailed overview of all developments. It will rather focus on key factors and lessons learnt on how to successfully overcome one of the most serious economic and societal crises in recent European history – and provide a starting point for a better international exchange on the future of a more resilient education system.

2. FIGHTING THE PANDEMIC: INSTITUTIONAL WEAKNESSES AND LACK OF POLITICAL REPRESENTATION

When the first wave of the COVID-19 pandemic reached Europe in January 2020, most of the member states and the European Union itself were shockingly unprepared.⁴ Despite recurrent warnings of new waves of global respiratory diseases since SARS and MERS, public administrations, the health sector, and businesses were caught almost unprepared. As an immediate reaction to curb further spreading of the virus, in-person education processes had to be transformed into a distant-learning mode within days – or were shut completely down as in the case of kindergartens and extra-curricular institutions such as those for sports or cultural activities. This had never happened in European history before, even in times of war.⁵

3. This extra-curricular sector is widely underestimated in most discussions on education. It reflects a huge variety of national and local traditions and structures and is therefore difficult to define.

4. For a recent review of the crisis impacts on the European Union: Paulo Vila Maior, and Isabel Camisão. 2022. The Pandemic Crisis and the European Union: COVID-19 and Crisis Management.

5. See the thematic webpage of OECD for detailed studies on different sectors of education: OECD. The state of education during the COVID pandemic. (<https://www.oecd.org/education/state-of-school-education-one-year-into-covid.htm>). Accessed 1 August 2022.

The legal basis and administrative framework were set to a large extent at the *national* level, using existing or newly created legal provisions for disease control. In addition, extensive tax and fiscal measures⁶ were taken by the European governments and the European Commission to cushion the negative economic impacts on economic activities, in particular labour markets, and to keep the health system functioning.

The situation for the education sector was rather complicated. In most European countries, decisions on education are made mainly through local and regional administrative bodies, reflecting the European tradition of strong local and federal self-administration.⁷ The situation is a bit different with regard to the university and vocational training systems, where national governments and entrepreneurial organisations have a larger influence not least due to their funding. During the first waves of the pandemic, governments tried to impose uniform rules on all educational institutions based on national health laws, leaving almost no space for individual institutions to decide to what extent and in which ways they could organise schooling and training under those new circumstances. Only later and based upon prior experiences was more decision-making power given back to lower-level administrations. But that often led to rather confusing situations on the ground, when, e.g., different rules on quarantine were applied even within one city. Consequently, discussions among parents and politicians became very heated and led to a massive decline in trust in politics.

In retrospect, it is still surprising that there had been almost no contingency plans for the education system. This disruptive external shock hit the system in almost every aspect: the legal responsibilities of employers and employees, e.g., in terms of the health of the teachers; the new infrastructural demands to switch to remote learning; the role of the parents as co-educators; and social and psychological assistance to the children.

Yet, the most affected – the children and young adults – had almost no say. Decision-making during the lock-down lacked very much a proper representation of the interests of the young generation – a phenomenon well-known in many

6. OECD. 2022. Tax Policy Reforms 2021. Special Edition on Tax Policy during the COVID-19 Pandemic; OECD. 2021. Tax and Fiscal Policies after the COVID-19 Crisis: OECD Report for G20 Finance Ministers and Central Bank Governors, October 2021.

7. Wolfgang Hörner, Hans Döbert, Lutz R. Reuter, and Botho von Kopp. 2015. The Education Systems of Europe.

policy fields and demographically ageing societies such as the European ones.⁸ This is, firstly, the result of an administrative/constitutional fragmentation in many European countries in the field of education, where clear political responsibility is often blurred. Secondly, decision-making in federal systems often takes a long time to find a consensus and to ensure internal coherence. And thirdly, there is a blatant lack of empirical data and clear scientifically based recommendations⁹ – even after two years of the pandemic – which threatens to undermine the trust and legitimacy of democratic systems. An open and fair discussion on who has to shoulder the load of the pandemic has hardly begun. If not properly resolved, this question has the potential to wedge apart the intergenerational cohesion of European societies. It will also widen social inequality as over the last 15 years Europeans have been facing an ever-increasing combination of economic, political, and social crises, culminating in a massive “stress symptom”, which may threaten the very fundamentals of European democracies.

3. PSYCHOLOGICAL CONSEQUENCES: THE PRICE TO PAY

At the peak of the pandemic, it was estimated that schools in 188 countries had been closed, heavily disrupting the learning process of more than 1.7 billion children, young adults, and their families.¹⁰ There is hardly any similar situation in recent history to be compared with. Psychological theory and empirical research have just begun to analyse and explain the short, but more importantly *mid- and*

8. Julian A. Hettihewa, and Anna Holzscheiter. 3 December 2020. Reclaiming the Voice of Youth: Pandemic Politics and Law and the Invisibility of Youth. (<https://www.ejiltalk.org/reclaiming-the-voice-of-youth-pandemic-politics-and-law-and-the-invisibility-of-youth/>). Accessed 1 August 2022.

9. The results of a recent evaluation of COVID-19 measures in German clearly show the striking uncertainties in science and politics as to how to effectively fight against the disease. For the German case see Sachverständigenrat. 2022. Evaluation der Rechtsgrundlagen und Maßnahmen der Pandemiepolitik. (<https://berliner-zeitung.de/blz-public/files/2022/07/01/ed01c861-6a3e-4dae-bf74-08fd5ecf380b.pdf>). Accessed 1 August 2022; OECD Policy Responses to Coronavirus (COVID-19), First lessons from government evaluations of COVID-19 responses: A synthesis. (<https://www.oecd.org/coronavirus/policy-responses/first-lessons-from-government-evaluations-of-covid-19-responses-a-synthesis-483507d6/>). Accessed 1 August 2022.

10. OECD. 2020. OECD Policy Responses to Coronavirus (COVID-19), Education and COVID-19: Focusing on the long-term impact of school closures. (<https://www.oecd.org/coronavirus/policy-responses/education-and-covid-19-focusing-on-the-long-term-impact-of-school-closures-2cea926e/>). Accessed 1 August 2022.

long-term effects of closures of education institutions.¹¹ To get a rough idea of those effects one can differentiate between (a) the potential learning losses in a narrow sense¹² and (b) more general effects on the psychological development and health of the younger generation.¹³

- a) A review of existing literature in different countries shows that the transition to remote learning has always led to significant losses both in the quantity and quality of learning content. A rough estimation of this specific impact can be given only for standardised curriculum-based education processes. But the latter covers only one part of the development of children. Important contributions to a successful upbringing come from non-standardised, less organised, and controlled environments, e.g., through interactions within peer groups. A correct estimation of the damage has to take into account this extended framework. Yet, those consequences can only be judged based on individual case studies. It is almost impossible to get large-scale and longitudinal studies. It is estimated that, in the worst case, losses might sum up to half of the normal curriculum. For complex development processes in a pre-school or extra-curricular environment, no solid estimation can be given. But if we take the rising numbers of psychological cases (such as depression, anxiety and social retreat, but also lack of physical activities) among the young generation as a proxy variable, a significant number of children have been suffering from the direct consequences of school closures and indirect ones, such as increasing tensions and violence within the family.¹⁴
- b) The last observation leads to the second cluster of negative consequences. Regarding mid- and long-term effects, the individual capacity to cope with

11. For the US see: Ashley Abramson. 2022. Children's mental health is in crisis. 1 January 2022, Vol. 53. No. 1, American Psychological Association. (<https://www.apa.org/monitor/2022/01/special-childrens-mental-health>). Accessed 1 August 2022. School closures are considered as the major variable in explaining negative impacts. But many other factors have to be counted in.

12. The difference between what could have been achieved in a traditional learning environment and by new forms of distant learning.

13. See OECD. 29 June 2020. OECD Policy Responses to Coronavirus (COVID-19), Education and COVID-19: Focusing on the long-term impact of school closures. The latter "hysteresis" effect is a bit similar to the effects of long-term unemployment.

14. In a recent study in Germany, 70 per cent of the children feel burdened, and a quarter complained of massive conflicts within the family; see: Kurt Hahlweg, Beate Ditzen, Ann-Katrin Job, Judith Gastner, Wolfgang Schulz, Max Supke, and Sabine Walper. COVID-19: Psychologische Folgen für Familie, Kinder und Partnerschaft. (<https://econtent.hogrefe.com/doi/10.1026/1616-3443/a000592>).

those challenges can be best described in terms of resilience. This well-known concept in psychology¹⁵ provides both an analytical background and a starting point for individual and collective intervention. While, e.g., losses described under a) might be compensated over time inside the educational system, effects on overall personal development might become apparent only after a certain time delay (“hysteresis”) and might be difficult to attribute to COVID-19.

What we, therefore, can assume is that the COVID-19 pandemic has led to *complex stress syndrome among children in sensitive phases of their development process*. Like in medicine the decisive point of therapy is providing enough physical and mental resources to cope with these challenges. In most cases, this task of compensating those losses can’t be left to the individual child or its family. The (ongoing) experience of the pandemic is a wake-up call to critically question institutional settings, priorities, and the value of education in European societies. In the last chapter, several recommendations will be drawn out from these findings.

4. SPEEDING UP THE DIGITALISATION OF EUROPEAN EDUCATION SYSTEMS

For the last two decades, digitalising education processes has been repeatedly claimed as a “Copernican turn” and “magic wand” to overcome the weaknesses of traditional training methods and institutions. Even if the empirical proofs for those claims have remained rather weak, hopes to compensate for the losses by “virtualising” them dominated the discussion and narrowed down the range of alternative solutions.¹⁶

First, there was and still is a massive resistance within the education system against giving digital forms of learning – or at least hybrid forms – a wider range. Most European countries lag years behind in terms of digital hardware and software infrastructure, and the situation of the education sector has often been even worse in this respect. Before the pandemic, only a few institutions had systematically developed roadmaps for merging traditional and digital ways of teaching from

15. David Fletcher, and Mustafa Sarkar. 2013. Psychological Resilience. A Review and Critique of Definitions, Concepts, and Theory. *European Psychologist* 18/1, March 2013. (<https://doi.org/10.1027/1016-9040/a000124>). Accessed 1 August 2022.

16. See for a critical review and the complex pedagogical challenges: Fanny Pettersson. 2021. Understanding digitalization and educational change in school by means of activity theory and the levels of learning concept. *Education and Information Tech* 26, 187-204 (2021).

the perspective of learning processes. Second, even today, many actors still share a rather simplistic, “technicist” view of digital education, focusing on providing hardware and software. Most teachers – and children – had never been properly trained in using digital technologies. They don’t understand the completely different environment and necessary preconditions for effective teaching under those circumstances. Only a minority of teachers have been sufficiently capable and motivated to seriously take up this challenge and maintain an almost equivalent quality level of education. In other parts of the education system, such as in kindergartens, there are hardly any processes and contents which can be digitised; almost all development processes depend on personal interactions, which can hardly be substituted.

In often desperate moves, the governments quickly allocated massive funds to push ahead with investments into digital infrastructure.¹⁷ But till today the problems lay often not in the funding *per se*¹⁸ but a lack of capacities *within* the educational institutions: Lengthy procurement procedures, missing common standards for software and privacy protection, and insufficient allocation of human resources in supporting and maintaining the new digital platforms – have all led to a massive decline or at least underperformance in learning effectiveness over the last two years. On the part of the pupils and their families, problems continued at home, in some ways very similar to what happened in the institutions. Social inequality in terms of the family budget and education level very much determined to what extent the digital transformation of education could be “digested” inside the families, e.g., by providing computers or allocating time to support the children as “co-teachers”. Further, one has to consider that many parents themselves were facing huge challenges at the same time due to being forced to work at home or even losing their jobs. In many cases, the learning environment at home had massively deteriorated, due to lack of space, conflicts, and danger of distraction.¹⁹ The situation was quite similar for university students, even if we assume a higher degree

17. The statistics on educational expenditure by Eurostat don’t provide exact data on investment in digital infrastructure; see: Eurostat, Government expenditure on education. (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Government_expenditure_on_education#Expenditure_on_.27education.27). Accessed 22 August 2022.

18. The Federal Government of Germany launched a DigitalPakt Schule in 2019, providing 5bn Euro for digital infrastructure in schools, and adding another 1.5bn in 2020; see Bundesministerium für Bildung und Forschung, Was ist der DigitalPakt Schule? (<https://www.digitalpaktschule.de/de/was-ist-der-digitalpakt-schule-1701.html>). Accessed 22 August 2022.

19. See, e.g., Tušl, M., Brauchli, R., and Kerksieck, P. et al. 2021. Impact of the COVID-19 crisis on work and private life, mental well-being and self-rated health in German and Swiss employees: a cross-sectional online survey. *BMC Public Health* 21, 741 (2021).

of self-organising learning processes.²⁰ But even in higher education, the challenges of self-motivation and discipline remained high. For the important sector of pre-schooling, digitalisation was and is almost irrelevant, as constant personal encounters with teachers, nurses and the peer group are crucial for any development processes in early childhood.

5. TRANSNATIONAL EDUCATION MOBILITY

So far, the situation of *domestic* education has been analysed. But Europe has developed into a leading global learning space and one of the largest education markets – at least in academic education, attracting millions of foreign students. Since the late 1980s, students' mobility within the European Union and neighbouring countries has significantly increased, not least due to the support of exchange programmes such as Erasmus, and the mutual recognition of qualifications.²¹ In parallel, overseas exchange numbers have also risen, in particular after the end of the Cold War. In 2018 roughly 1.3 million students from abroad studied in the EU-27 countries²² while attempts in the field of vocational training had been less successful, i.e., through the Leonardo programme.

Already during the first wave of COVID-19, *in-person* exchange of students had come to an almost complete halt. Numbers sank dramatically between 2019 and early 2020 and haven't fully recovered even in 2022. The numbers of foreign students probably overestimate the real decline as many exchange programmes tried to survive by switching to online courses.²³ But this could only marginally compensate for the loss of experience and quality of education which come along with an in-person exchange and life experience abroad. In terms of financial losses, the highly commercialised Anglo-Saxon university system suffered the most, in

20. The largest global survey is currently the COVID-19 International Student Well-being Study (C19 ISWS) in 26 countries and 110 higher-education institutions (HEIs). See Van de Velde S., Buffel V., Bracke P., Van Hal G., Somogyi N. M., Willems B., and Wouters E. 2021. C19 ISWS consortium. The COVID-19 International Student Well-being Study. *Scandinavian Journal of Public Health*. 2021 Feb; 49(1):114-122.

21. See for the creation of European Higher Education Area in the course of the Bologna Process: Shams, Farshid, Huisman, Jeroen, C. C. Hsieh, S. Wilkins, and C. Adelman. 2012. *The Bologna process and its impact in the European Higher Education Area and beyond*.

22. This includes students from other EU countries (roughly 70 per cent) and non-European countries.

23. Erasmus Student Network ESN. 2020. *Student Exchange in Times of Crisis*. (<https://esn.org/covidimpact-report>). Accessed 2 August 2022.

contrast to the predominantly state-funded continental institutions.²⁴ And it can be predicted that even after all COVID-19-related travel restrictions are abolished, structural changes in transnational education “markets” will remain, affecting the European education “market”. For example, the number of Russian and Chinese students (the latter have always been the largest non-European group) will probably be significantly lower than that before 2020, due to political reasons.

Discussing the role of the European Union, it is only since the Maastricht treaties of 1992, that the European Commission has tried to get more engaged in the field of education and training insofar as transborder issues are concerned.²⁵ The demand for facilitating cross-border education and mutual recognition will increase, while the major responsibility of compensation for COVID-19-related losses will stay with the nation-states. A more important aspect is the intelligent use of the COVID-19 recovery funds, governed by the European Commission. While 30 per cent of the funds are dedicated to fighting climate change²⁶, education has been mentioned but not prioritised.

6. RECOMMENDATIONS

Even though we are not yet in a post-pandemic world, some conclusions and recommendations can already be drawn based on sufficient international experience over the last two years.²⁷ The point of reference for any recovery policy in the field of education has to be the *concept of resilience*: to develop effective strategies to compensate for or avoid learning and other development losses and to be better prepared for future external shocks. During the last two years, it has become obvious that all stakeholders in education processes have to take their respective responsibilities and join efforts. Too many had been quick at calling for the government to be the solely responsible stakeholder. This does not reflect the

24. Oliver Hall. 2022. University sees ‘stark’ decline in EU students post-Brexit. (<https://cherwell.org/2022/05/15/university-sees-stark-decline-in-eu-students-post-brexit/>). Accessed 22 August 2022.

25. (<https://www.daad-brussels.eu/en/eu-higher-education-policy/overview-of-eu-higher-education-policy/>). Accessed 22 August 2022.

26. For the recovery plans see (https://ec.europa.eu/info/strategy/recovery-plan-europe_en).

27. For regularly updated overviews see UNESCO. COVID-19 Recovery: Working together to restore our shared humanity. (<https://www.unesco.org/en/covid-19?hub=800>). Accessed 2 August 2022; OECD. The State of education during the COVID pandemic. (<https://www.oecd.org/education/state-of-school-education-one-year-into-covid.htm>). Accessed 2 August 2022.

complexity of the challenges, which would be beyond the resources of even the richest European countries to address individually and which would be against the European principle of diversity and subsidiarity.

1. Each rational policy has to be based on scientifically valid and reliable data. In sharp contrast to the enormous impacts of the pandemic, empirical data on the scope, intensity and even necessity of the containment measures on the young generation in Europe is appallingly bad. In addition to national surveys, the OECD and UNESCO are probably best suited to provide a framework for continuously observing the development, e.g., by extending the regular Project for International Student Assessment (PISA)²⁸ and including questions related to the mid- and long-term impacts of the crisis.
2. Given the substantial increase in fiscal spending to overcome the effects of the pandemic, too many resources in the education system are still being spent on assumptions which are not empirically founded, not sufficiently specific and not effectively targeted. European policymakers and those responsible in the education sector are still poking around in the fog on how to balance, for example, protection against maintaining open educational spaces – and those who suffer most from this deplorable ignorance is the young generation.
3. The role of the individual education institution has to be strengthened. As with the negative impacts, successful post-pandemic recovery depends on many, very specific and local factors, such as social structures, cultural traditions, etc. This knowledge is best available at the local level, where different resources can be combined best. A higher degree of financial and decision autonomy should be granted to educational institutions to enable quicker reactions and for more efficient spending. Private initiatives should be supported as well as they have become an important part of increasing the resilience of the European education system.
4. Even before the pandemic, the crucial role of families and small communities in crisis reaction had become clear. These small “structures” are also at the heart of each successful education and development process. In the field

28. The OECD has already introduced a tool to capture learning experiences during COVID-19, the PISA Global Crises Questionnaire Module; see: (<https://www.oecd.org/publications/a-tool-to-capture-learning-experiences-during-covid-19-9988df4e-en.htm>). Accessed 2 August 2022.

of the integration of migrants, it is now commonly accepted that successful integration processes have to start in early childhood and that the family as a whole has to be addressed and not just the children. The situation in times of pandemic is quite similar. It has put many families under tremendous pressure, financially and psychologically. While the richer countries can rely on an already existing system of social services, poorer European countries are facing tough decisions about where to spend resources within an already heavily strained socio-economic environment. That's where Europe comes into the game, by cushioning those regional imbalances.

5. The education system plays a crucial role in the wider framework of national and European recovery plans. Yet, many measures are only loosely connected, often just labelled as recovery related. And beyond immediate recovery lies the bigger challenge of a sustainable transformation. Currently, we find (too) many loose ends in different recovery concepts. Individual and collective learning understood as a life-long process has to be put at the centre of a comprehensive transformation. The moment of the pandemic – as harsh as it may sound – should be used.
6. It took weeks and months for politics and the individual institutions to adjust internal procedures and develop curricular concepts to (re)establish a basis for teaching under totally changed conditions. This was partly the result of unclear political decisions at the higher national or regional framework on how to counter the pandemic. But it can be attributed also to the fact that prior homework had not been done at the level of many education institutions, e.g., in terms of digitalisation.
7. Procurement rules and regulations in terms of privacy for the use of digital tools should be homogenised at least at the national level, but more freedom in implementation should be given to individual institutions. Digital literacy has to be taught as early as possible.
8. It was not just the education sector which was affected by massive lockdowns. The whole “web” of extracurricular activities, organised by sports associations and religious organisations, as well as self-organised parents' initiatives, has been suffering, often hardly receiving any kind of additional support. But those contributions have to be acknowledged and backed. The danger to young people of disengaging not only in education but in a wider range of social activities and as active citizens could have long-term detrimental effects on the democratic system.

9. Despite being a very sensitive topic, there must be a debate on a fair sharing of costs among different parts of society. During the recent pandemic waves, the young generation has massively suffered, and the long-term effects on their development are not yet clear. Their voices and interests have to be better respected in political discourses and decision-making.
10. The experience of being locked out from institutionalised forms of education should be taken as a wake-up call that education in many European societies doesn't have the status it deserves. Increased spending on education should not be a short-term "wildfire" but the strategic importance of this sector should be recognised instead.
11. International exchange programmes have largely suffered from the pandemic due to the closing of borders, economic recession and shrinking/shifting private and state budgets. In times of rising geopolitical tensions, decoupling, and systemic rivalry, European nations should maintain or even increase their efforts to facilitate the exchange of the young generation not only within Europe but also across continents. Successful programmes such as Erasmus+²⁹ should be expanded beyond Europe's borders to promote Europe as a unique space of education and training.

²⁹ Erasmus-plus.ec.europa.eu. Erasmus+. EU programme for education, training, youth and sport. (<https://erasmus-plus.ec.europa.eu/>). Accessed 2 August 2022.

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References

- Ashley Abramson. Children's mental health is in crisis. (<https://www.apa.org/monitor/2022/01/special-childrens-mental-health>).
- Bundesministerium für Bildung und Forschung. Was ist der DigitalPakt Schule? (<https://www.digitalpaktschule.de/de/was-ist-der-digitalpakt-schule-1701.html>).
- DAAD. (<https://www.daad-brussels.eu/en/eu-higher-education-policy/overview-of-eu-higher-education-policy/>).
- David Fletcher, Mustafa Sarkar. Psychological Resilience. A Review and Critique of Definitions, Concepts, and Theory. *European Psychologist* (2013), 18, pp. 12-23.
- Erasmus Student Network ESN. Student Exchange in Times of Crisis, 2020. (<https://esn.org/covidimpact-report>).
- European Commission. Recovery Plan for Europe. (https://ec.europa.eu/info/strategy/recovery-plan-europe_en).
- Eurostat. Government expenditure on education. (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Government_expenditure_on_education#Expenditure_on_.27education.27).
- Fanny Pettersson. Understanding digitalization and educational change in school by means of activity theory and the levels of learning concept. *Education and Information Technology* 26, 187-204 (2021).
- Ivan T. Berend. *The contemporary crisis of the European Union: prospects for the future*. Abingdon, Oxon; New York, NY: Routledge, 2017.
- Julian A. Hettihewa, Anna Holzscheiter. Reclaiming the Voice of Youth: Pandemic Politics and Law and the Invisibility of Youth. (<https://www.ejiltalk.org/reclaiming-the-voice-of-youth-pandemic-politics-and-law-and-the-invisibility-of-youth/>).
- Kurt Hahlweg, Beate Ditzen, Ann-Katrin Job, Judith Gastner, Wolfgang Schulz, Max Supke, Sabine Walper. COVID-19: Psychologische Folgen für Familie, Kinder und Partnerschaft, *Zeitschrift für Klinische Psychologie und Psychotherapie* (2021), 49, pp. 157-171.
- Martin Tušl, Rebecca Brauchli, et al. Impact of the COVID-19 crisis on work and private life, mental well-being and self-rated health in German and Swiss employees: a cross-sectional online survey. *BMC Public Health* 21, 741 (2021).
- OECD Policy Responses to Coronavirus (COVID-19), Education and COVID-19: Focusing on the long-term impact of school closures. 29 June 2020.
- OECD Policy Responses to Coronavirus (COVID-19), First lessons from government evaluations of COVID-19 responses: A synthesis. (<https://www.oecd.org/coronavirus/policy-responses/first-lessons-from-government-evaluations-of-covid-19-responses-a-synthesis-483507d6/>).

- OECD, OECD Policy Responses to Coronavirus (COVID-19), Education and COVID-19: Focusing on the long-term impact of school closures, 2020. (<https://www.oecd.org/coronavirus/policy-responses/education-and-covid-19-focusing-on-the-long-term-impact-of-school-closures-2cea926e/>).
- OECD, Tax Policy Reforms 2021. Special Edition on Tax Policy during the COVID-19 Pandemic, 2022; OECD, Tax and Fiscal Policies after the COVID-19 Crisis: OECD Report for G20 Finance Ministers and Central Bank Governors, October 2021.
- OECD, The PISA Global Crises Questionnaire Module, 12 October 2020. (<https://www.oecd.org/publications/a-tool-to-capture-learning-experiences-during-covid-19-9988df4e-en.htm>).
- OECD, The state of education during the COVID pandemic. (<https://www.oecd.org/education/state-of-school-education-one-year-into-covid.htm>).
- OECD.org, The State of education during the COVID pandemic. (<https://www.oecd.org/education/state-of-school-education-one-year-into-covid.htm>).
- Oliver Hall. University sees 'stark' decline in EU students post-Brexit. (<https://cherwell.org/2022/05/15/university-sees-stark-decline-in-eu-students-post-brexit/>).
- Paulo Vila Maior, Isabel Camisão. The Pandemic Crisis and the European Union COVID-19 and Crisis Management, 2022.
- Sachverständigenrat. Evaluation der Rechtsgrundlagen und Maßnahmen der Pandemiepolitik, 2022. (<https://berliner-zeitung.de/blz-public/files/2022/07/01/ed01c861-6a3e-4dae-bf74-08fd5ecf380b.pdf>).
- Sarah Van de Velde et al. The COVID-19 International Student Well-being Study. Scandinavian Journal of Public Health. 2021 Feb; 49(1): pp. 114-122.
- Shams, Farshid and Huisman, Jeroen et al. 2012, The Bologna process and its impact in the European Higher Education Area and beyond. SAGE handbook of International and Higher education, pp. 81-100.
- UNESCO, COVID-19 Recovery. Working together to restore our shared humanity. (<https://www.unesco.org/en/covid-19?hub=800>).
- UNESCO, COVID-19 Recovery. Working together to restore our shared humanity. (<https://www.unesco.org/en/covid-19?hub=800>).
- Wolfgang Hörner, Hans Döbert, et al. 2015, The Education Systems of Europe.