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Effects of the COVID-19 Pandemic on Students and their Parents

Abstract: The COVID-19 pandemic resulted in school closures in spring 2020 in many countries, including Germany, to stem the spread of the virus. From one day to the next, school learning became the responsibility of parents, and school administrators expected teachers in all types of schools to switch from almost exclusively analogue teaching to distance learning - in particular to digitalized teaching - from one day to the next. In this article we analyze what this means for families. It is shown that the inequality of opportunities in education is increased when schools and families lack digital equipment and expanded Internet connections. It describes the problems that parents and children have had and will continue to have with immature and unproven concepts of distance learning, since schools in Germany are far from making up for the deficit in the area of digitized instruction. The state of emergency in the time of a pandemic also clearly shows the limits of innovative teaching with the new media and raises awareness of the importance of an intensive analogue pedagogical teacher-pupil relationship.

Keywords: pandemic COVID-19, parents in times of a pandemic, education in times of a pandemic, digitization, digitized teaching, teacher-student relationship

摘要(與尔加·格劳曼:新冠状病毒大流行对学生及其父母的影响):新冠状病毒大流行导致2020年春季,包括德国在内的许多国家关闭了学校,以阻止该病毒的传播。从一日到次日,学校学习已成为家长的责任,并且学校管理者期望所有类型学校的老师从这一天到第二天,从几乎完全是模拟的教学转变为远程学习,尤其是数字化教学。在本文中,我们分析了这对家庭意味着什么。结果显示当学校和家庭缺乏数字设备和扩大的互联网连接时,教育机会的不平等已然加剧。文章描述了家长和孩子在不成熟的和未经证实的远程学习概念上已经并将继续存在的问题,因为德国的学校远不能弥补数字化教学领域的不足。大流行时期的紧急状态也清楚地表明了使用新媒体进行创新教学的局限性并提高了人们对强化模拟教学中师生关系重要性的意识。

关键词:新冠状病毒大流行,大流行时期的家长,大流行时期的教育,数字化,数字化教学,师生关系

摘要(奧爾加·格勞曼:新冠状病毒大流行對學生及其父母的影響):新冠状病毒大流行导致2020年春季,包括德国内部的许多国家关闭了学校,以阻止该病毒的传播。从一日到次日,学校学习已成为家长的责任,并且学校管理者期望所有类型学校的老师从这一天到第二天,从几乎完全是模拟的教学转变为远程学习,尤其是数字化教学。在这里,我们分析了这对家庭意味着什么。结果显示当学校和家庭文章描述了家长和孩子在不成熟的和公认的远程学习概念上已经替换继续存在的问题,因为德国的学校远大流行时期的紧急状态也清楚地表明了使用新媒体进行创新教学的局限性并提高了人们对强化模拟教学中师生关系高度的意识。

关键词: 新冠状病毒大流行, 大流行时期的家长, 大流行时期的教育, 数字化, 数字化教学, 师生关系

Zusammenfassung (Olga Graumann: Auswirkungen der COVID-19-Pandemie auf SchülerInnen und ihre Eltern): Die Covid 19 Pandemie hatte im Frühjahr 2020 in zahlreichen Ländern, so auch in Deutschland Schulschließungen zur Eindämmung der Verbreitung des Virus zur Folge. Schulisches Lernen wurde von heute auf morgen in die Verantwortung der Eltern gelegt und die Schuladministration erwartete, dass die Lehrenden aller Schulformen von jetzt auf gleich von einem fast ausschließlich analogen Unterricht auf distance learning – insbesondere auf digitalisierten Unterricht – umstellen. In diesem Artikel wird analysiert, was das für die Familien bedeutet. Es zeigt sich, dass die Chancenungleichheit im Bildungsbereich erhöht wird, wenn es an Schulen und in den Familien an digitalen Geräten und modernen Internetanschlüssen fehlt. Es werden die Probleme beschrieben, die die Eltern und Kinder mit unausgereiften und unerprobten Konzepten des Fernlernens hatten und weiterhin haben werden, da Schulen in Deutschland das Defizit im Bereich digitalisierten Unterrichts noch lange nicht aufholen können. Der Ausnahmezustand in der Zeit einer Pandemie zeigt auch deutlich die Grenzen eines innovativen Unterrichtens mit den neuen Medien und rückt die Bedeutung einer intensiven analogen pädagogischen Lehrer-Schüler-Beziehung wieder stärker ins Bewusstsein.

Schlüsselwörter: Pandemie Covid 19, Eltern in Zeiten einer Pandemie, Bildung in Zeiten einer Pandemie, Digitalisierung, Digitalisierter Unterricht, Lehrer-Schüler-Beziehung

Резюме (Ольга Грауманн: Влияние пандемии COVID-19 на учеников и их родителей): Пандемия COVID-19 вынудила многие страны, в том числе Германию, закрыть школы для ограничения распространения коронавирусной инфекции. В один момент то, за что отвечала школа, оказалось в зоне ответственности родителей, а школьные администрации рассчитывали на то, что их педагоги так же быстро смогут переключиться с «классического» формата обучения и трансфера знания на новый, дистанционный. В данной статье проводится анализ того, как справляются с данной ситуацией школьники и их родители. В ходе данного анализа выясняется, что в период пандемии растет число тех, кто ощущает себя в неравных условиях в образовательном дискурсе, прежде всего по причине нехватки в школах и семьях соответствующей техники и недостаточной обеспеченностью интернетом. Описываются проблемы, с которыми сталкиваются дети и их родители, когда обучение ведется по новым, не до конца отшлифованным и слабо апробированным концепциям электронного образования. Высказываются опасения, что эти проблемы быстро не решатся, поскольку школам в Германии нужно будет еще долго наверстывать упущенное в вопросах дигитализации обучения. Та чрезвычайная ситуация, которая складывается на сегодняшний день, в том числе в образовании, четко показывает границы эффективности форматов обучения с помощью цифровых технологий и все сильнее побуждает к рефлексии над тем, сколько преимуществ дает прямой, непосредственный контакт между учителем и учеником в образовательном процессе.

Ключевые слова: пандемия Covid 19, родители в период пандемии, образование в период пандемии, дигитализация, дистанционное обучение, коммуникативный паттерн «учитель – ученик»

Preliminary note

After the pandemic is before the pandemic - SARS-CoV-2 is not expected to be the last virus to affect our lives. For this reason, it is necessary to think about what needs to change in the education sector to provide education in situations of social isolation and to provide educational work in the child and youth sector. When virologists first proposed to close all educational institutions from kindergarten to universities for a certain period of time in order to reduce transmission chains of the COVID-19 virus, this thought was unimaginable. In the meantime, we are gaining experience worldwide of what it is like when institutionalized education and upbringing no longer function as usual.

Nobody was prepared for a total failure of face-to-face teaching and it is not surprising that the resulting pressure on the administration, teachers, students and parents was enormous and will certainly continue to be so. It is now interesting - a few months after the standstill and a period of slow return to "normality" and fear of new school closures - to analyze what was triggered by this scare among all those affected in the educational sector. The main point of discussion in educational policy, in current pedagogical writings and at pedagogical congresses is digitization, since digitized teaching seems to be the solution par excellence.

In the following, the focus will be on the effects of school closures and reduced attendance periods on students and their parents, on the limitations of digitization and on what we can learn for the future from the experiences of recent months.

1. What does it mean for students and parents if the switch to distance learning using digital media is made overnight?

At the beginning of the following discussion, it must be pointed out that German schools have "slept through" digitization and are nowhere near able to make up for these failures in the difficult times of the pandemic. Studies show that the requirements associated with digitization are not sufficiently systematically anchored in all three phases of teacher training in Germany (Eickelmann, & Drossel, 2020, p. 356), despite the "Digital Pact for Schools 2019-2024" approved by the federal government, which provides financial support to the German states in equipping schools with IT systems and networking them.

The reason for this is certainly also to be seen in the fact that Germany is a densely populated country where every student can attend an educational institution within easy reach of his or her place of residence and distance learning is not necessary for spatial reasons. As a result, many teachers have not felt motivated to work on acquiring techniques, methods and strategies for learning with digital media. Other countries that have had years of experience with distance learning because of their geographical characteristics, such as Canada, are better placed to do so.

It has become very clear in recent months that most schools had no concept of distance learning and some still do not have one. In many cases, the students were overwhelmed with worksheets at the beginning of school closures, which were sent to the parents by e-mail. The parents were naturally expected to have a well-functioning printer and to be able to spend the time not only to print out these worksheets, but also to sort them accordingly. With three school-age children in different types of schools, 30 or more worksheets can be collected per school day. One mother told me that on many evenings she spent up to two hours just printing out the work assignments, sorting them and putting them on the desks of each of her three children. It is already clear here that this is not possible in families that do not have a computer and printer.

Over time, many teachers who had not previously been involved in digitized instruction made an effort to reach students through WhatsApp, educational programmes, and learning apps. Many schools, however, do not work with one learning platform, but each teacher uses a different platform and different programmes for his or her subject and class. This means that in a family with, for example, three students, not only the student himself, but usually also the mother or father has to deal with numerous platforms and learning programmes. This also means - if you take into account that at least one parent often works from home - that each family member must have his or her own PC, laptop or tablet and that the IT network has sufficient capacity to allow everyone to work on the Internet at the same time. In many areas of Germany, the network capacity is not even sufficient to operate a cell phone! It is obvious that sufficient equipment with terminal devices is only available in a limited number of homes. And even if the devices are available, it is clear that access to the devices repeatedly fails due to technical factors (Hummrich, 2020, p. 169).

Sending worksheets to students via e-mail, tasks in learning apps and video-based teaching are only the first step, however, because the worksheets have to be processed, the tasks in the learning programmes have to be solved and attendance and participation in the video conferences have to be guaranteed. It is obviously assumed that each student can set up and operate the platforms on his or her device independently, that worksheets can be worked on independently, and that students can follow digital lessons attentively and in a timely manner, regardless of whether they have a suitable room and the necessary terminal equipment at home. There may be children and young people who can do everything without any help from an adult - but experience shows that the majority of students need constant help and supervision.

Who provides this necessary assistance in families where both parents are dependent on working outside the home for financial reasons? What happens in the parental homes where there is no terminal device at all or only one for the whole family? Do children from such families not receive an education in times of a pandemic? Are they systematically "left behind"?

Inequality of opportunity in the education system has been a recurring theme in Germany since the 1970s at the latest. The impact of the pandemic on the education system has brought this issue back into focus. "I made a lot of phone calls, I wrote WhatsApps, but maybe 20 percent of the children I did not reach during the lockdown," says one teacher in an interview (Heinemann, 2020, p. 26) and it is to be feared that the educational inequality of the German school system will increase during the time of the Corona crisis (Hoffmann, 2020, p. 30). There are still no representative empirical studies on this issue.

Working parents are dependent on the institutions which are responsible for schooling and part of the care for children and young people actually functioning. In Germany, for the first time in 75 years, this care is no longer guaranteed, thus confronting working parents with mostly insoluble problems. Not only school lessons, but also extra-curricular childcare options and help with schoolwork are essential for the compatibility of family and career. If kindergarten, school and after-school care are no longer available, the main burden is usually borne by the mothers (Müller, Samtleben, Schmieder, & Wrohlich, 2020, p. 6), who have to take unpaid leave and thus endanger their jobs. Particularly if they are single parents, they are now often faced with financial and health ruin.

The media often talk about parents who work from home being able to supervise their children at home and learn with them. On the one hand, it has been found that in families with children under 12 years of age, where both parents are employed, only a maximum of half of them can work partially from home (loc.cit., p. 6). On the other hand, it must be considered that effective work from home is only possible if a quiet workplace is guaranteed and one parent can take over the schooling and care

of the children. Full-time home office and simultaneous school and emotional care of children, that is not possible.

Children who need the social community outside the home, because the parental home cannot offer them experiences that are conducive to development, can suffer psychological and health damage. In an interview, a teacher reports about children who sat in front of the TV or played on their smartphones all day long and were not allowed to leave the house for several weeks for fear of infection (Amendt, 2020, p. 29). A first empirical study representative of Germany has been conducted by the Technical University of Munich on the assumption, frequently voiced in the media, that violence in families has increased during curfews and contact restrictions (Steinert, 2020). It was found that physical violence against women and children increased in families that were in quarantine. Risk factors are in particular financial worries, loss of employment, short-time work as well as anxiety and depression. The researchers strongly recommend that emergency care be provided in the event of further school closures or reduced institutional care times, even if one or both parents are at home.

On the other hand, children who are bullied at school or suffer from the pressure of school can flourish during this time. A mother, for example, reports that her son Luca, who is being pressured at school by a group of girls and finds it difficult to adjust to peers and communicate on their level, was happier and more relaxed than ever before during the time of complete school closure and that he completed all the tasks set by the school independently and with joy.

Parents with an affinity for education use the time to learn with their children a lot and also promote the effective and sensible use of digital media. However, the losers in times of school closures and whatever kind of homeschooling are likely to be children from underprivileged families.

Just as different families result from their differing social status and financial situation, so do they experience this time differently. The assessment of parents as it is discussed in the media ranges from statements and headlines like "Parents finally have time for their children" to "There is a chance that parents now know exactly what their children are learning at school" to "Total overtaxing of children and parents in so-called homeschooling" to "Children suffer from social isolation" and "Children from disadvantaged families and single mothers are left behind". There is some truth in each of these statements.

2. What are the limits of homeschooling and digitalized teaching that become apparent during the period of discontinuation of analogue teaching?

Digitization is one of the most significant innovations in the education sector today. However, in order to be able to exploit the "added value of digitization compared to traditional media," "the step from information carrier to information processing is necessary. And this can only succeed if teachers are able to do so," emphasizes Ziegler (2018, p. 66). Among teachers, however, the prevailing opinion is that it is questionable whether the Corona crisis will initiate a fundamental digital transformation of schools, and it is assumed that many colleagues will continue to perceive digitization as an imposed process (Falck, 2020, p. 32). This view of many teachers is understandable in that the use of computers, laptops, learning platforms, apps, etc. in the classroom means that the technical devices should not be seen as a mere substitute for paper and pencil. Digitization must enable a new quality of knowledge acquisition and understanding of learning content. And this means that it must be a personal concern for teachers and that they must invest a lot of time in deciding when blackboard and chalk or an analogue visit to a museum are pedagogically and methodologically advisable, for example, and when the use of learning programmes or virtual tours is the right didactic decision. As fundamental as well-functioning technical equipment is, this question is marginal in view of the new challenges to the didactic skills of teachers in our time.

There is no doubt that there are schools and teachers who have long since taken up this challenge and are up to it. However, the Corona crisis has shown that they are a minority - and school closures decreed by politicians are an inconvenient time to switch from analogue to digital teaching, because the switch is not the result of a pedagogical innovation that teachers are convinced is effective. If schools are currently making the transition, it is only for forced organizational reasons and in order to at least partially maintain the teaching of school-age children. Rohrs, Pietraß, & Schmidt-Hertha

(2020, S, 363) also observe great ambivalence towards digital media in adult education and teacher training. One reason for this is that the potential and risks of using digital media cannot be adequately tested and reflected upon due to rapid technological development (loc.cit., p. 364). Teachers tend not to expect any relief from the burden of digitization and are sceptical about its effectiveness with less able students and low achievers. It is assumed that the use of digital media contains subject-related, didactic and pedagogical potential that can support the subject-related and interdisciplinary acquisition of competencies by students (Eickelmann, Gerick, 2017). The word "can" is decisive here. The benefits that students derive from the use of digital media vary greatly and depend primarily on how individualized in terms of learning level and learning ability the learning programmes are structured, i.e. whether and to what extent they are adapted to the individual needs of learners.

Hilbert Meyer, one of the most well-known didacticians in Germany, presents an eight-point catalogue of didactic requirements for homeschooling and blended learning in Corona times. He emphasizes that there are no exclusive homeschooling criteria, but what is good for conventional teaching is also good for homeschooling and blended learning. His eight points are therefore based on the "old European didactic tradition" (Meyer, 2020, p. 8) As a first feature, Meyer emphasizes the importance of a work alliance between teachers and students and points out that this "crumbles" in digital learning: "Students who are lazy in learning find clever excuses not to start at all; those who are less productive despair and stop learning. The parents do not know whether and how they should help" (loc. cit., p. 9). This problem can only be solved if the teacher, students and parents enter into personal communication with each other, e.g. by telephone or video conference. Other features are clearly defined structures, fixed working hours and a quiet workplace (loc.cit., p. 9). Although Meyer points out in a concluding remark that students who live in precarious living conditions need special attention, he fails to elaborate in the article cited here how difficult it is for parents in socially strong positions to create a quiet workplace for several children of different ages, especially when they themselves work from home. The characteristic of strengthening the "ability to control oneself" (op. cit., p. 9) undoubtedly has its entitlement - but only some of the students succeed in this. What happens to the students who need institutionalized structures for this very purpose, which their parents' home cannot offer them for organizational reasons alone? The characteristic of "taking and giving feedback" (op. cit., p. 10) is actually a matter of course. However, many of the children I interviewed reported that there was no feedback at all for the flood of worksheets they received from their teachers and worked on in homeschooling - presumably because the teachers felt overwhelmed time-wise or did not consider it important. The sixth grader Julius, for example, was asked to create a PowerPoint presentation about the dormouse. He researched on the Internet and designed the presentation with great dedication. In the presence phase, in which a part of the class met every second week, he was not allowed to give the presentation in front of the class for reasons of hygiene. He did not receive any feedback on the work he had done.

Overall, Meyer concedes that the advantages of homeschooling and blended learning are narrowly limited and that the disadvantages outweigh them (op. cit., p. 10). In recent years, numerous studies have shown that digitization in science, mathematics, reading and writing classes has only a limited impact (Zierer, 2018, p. 48; OECD, 2015) and that learners can remember what they have heard better if they write it down by hand than with a laptop or computer (Zierer, 2018, p. 55). If learning on a computer, laptop or tablet is to be effective, it must not be used as a substitute for traditional media, but that is precisely what is currently the norm. According to Zierer, digitization can only be helpful in the classroom if - as Meyer emphasized - it takes into account the initial learning situation, if it challenges but does not overwhelm students, if it builds trust and confidence, makes mistakes visible and initiates conversations about one's own learning process (Zierer, 2018, p. 64). These are demands that are familiar from analogue teaching. In times of forced distance-learning, this means that teachers communicate directly with their students on a daily basis, give feedback on every piece of work they have done, tailor the tasks individually to the learning situation, and select the tasks in such a way that they can be processed better with the help of new media than with conventional media.

This may be a reasonable demand that is being made of the teachers here, but under the current conditions in Germany, it will be difficult to meet it in terms of technique etc. (see above), because no teacher can communicate daily with all students via media. Since most papers are submitted in writing, individual feedback for the teachers is much more time-consuming than in analogous lessons.

This means that in the kind of distance-learning currently practised in most German schools, too little attention is paid to the importance of an intensive teacher-student relationship. "More important than the age group or the subject or the technology is the question of how the teacher succeeds in integrating digital learning into the classroom," writes Zierer (2018, p. 49). The importance of the teacher for effective teaching and the need to build pedagogical work alliances has been repeatedly highlighted in the pedagogical literature (Algermissen, 2012; Hattie, 2018, p. 24 ff., & Graumann, 2018, p. 161 ff.) - this topic is not new. Three weeks after school closures due to COVID-19 began, a nationwide survey found that the students interviewed had hardly any contact with their teachers during this time. 26 % of the students stated that they used chats to communicate with teachers, 22 % used a cloud for this purpose and 16 % communicated in video conferences. 50 % received help from friends via chat, 43 % from parents and only 32 % through school (Holland-Letz, 2020, p. 24). For example, a middle school student tells me that the teachers never contacted her during the period of total school closure and that she was not given any school assignments.

When students and their parents from different schools and in different regional states are interviewed, it becomes clear how differently the students experience the time of distance from the institution of school and how differently the teachers act. A mother of three children, one of whom attends kindergarten, one elementary school and one high school, reports on fundamentally different experiences. The kindergarten teacher, for example, read half an hour each morning from a children's book to a small group of children via a video link, thus maintaining personal contact between herself and the children. The elementary school teacher wrote individual e-mails to each child, sent a video in which he reported on himself and his experiences during the time the school was closed, and gave the children manageable tasks via e-mail, which they could work on independently in a way that suited them. In Latin, the students in the 6th grade of a high school had to learn the subjunctive themselves using the textbook and translate texts from the book every day without additional help. The Latin teacher, however, always understood when tasks were not completely mastered. In mathematics and biology, on the other hand, the students were inundated with worksheets for which they rarely received feedback. Parents, for their part, reacted differently. Those who had the technical and organizational prerequisites made a great effort to ensure that their children met all the school requirements. Others strictly refused to take over the tasks of professional teachers and in many families it was not possible to meet the requirements for technical and organizational reasons. The mother of a 5th grade boy, on the other hand, says that her son sits in front of the computer for up to six hours a day to complete all the tasks set.

In my opinion, one aspect is too seldom addressed in the discussion about digitization and must also be mentioned here. The regional state chairwoman of the GEW (Union of Teachers) in Lower Saxony writes: "The shimmering vision of a completely digitized education would give companies in the digital sector [...] the opportunity to fill children's and young people's rooms with (even more) electronics and to sell this to us as an innovation" (Pooth, 2020, p. 3), and she emphasizes that the Corona era has impressively proven that "learning via blinking terminals" can by no means replace school (loc.cit., p. 3). Engartner also points to the economization of education and demands that the "Digital-Pakt School can also be interpreted as the result of a long-standing campaign by the leading hardware and software manufacturers, while other justified educational concerns such as the inclusion of people with disabilities, the integration of refugees or the improvement of the teacher-learner relationship have been neglected" (Engarten, 2020, p. 34). The author refers to the creeping advertising in times of digital euphoria and speaks of education policymakers who are falling into a digitization frenzy (op. cit., p. 40).

Manfred Spitzer, a renowned neuroscientist who has been campaigning for years against digitization, especially in children's rooms, points out in his book "Digitale Demenz. Wie wir uns und unsere Kinder um den Verstand bringen" ("How we drive ourselves and our children out of their minds"), points out a general danger of constantly dealing with the new media: "Digital media lead to us using our brain less, which means that its performance decreases over time. In young people, they also impede brain formation; mental performance therefore remains below the possible level from the outset" (2012, p. 322). Particularly if - as mentioned above - children have to learn how to use digital media sensibly and in a way that promotes their development in today's world, critical voices such as Spitzer's should be heard and considered, especially by the ministries of education.

The massive use of computers, laptops, tablets etc. in the home office has also shown the vulnerability of the devices and of the network, and also the limitations. Even against hacker attacks, which can

paralyze both home office and home schooling for weeks, there is no real protection. "What is certain is that a school that binds itself to digital technology for better or worse could be forced into a devastating digital shutdown by viruses of a different kind" (Böhme, 2020, p. 35). This also raises the question whether we really want our children to spend so many hours in front of and with a digital device.

Like all technical innovations, digitization is both a blessing and a curse. It is a blessing when it is used sensibly and in a way that promotes the development of children and young people, and a curse when it prevents children and young people from developing analogue communication and hinders socialization processes in peer groups. School must also be a protective zone in which people reflect on what the Internet does to us and to democracy.

3. What can we learn for the future from the exceptional situation of a pandemic?

In exceptional situations such as a pandemic, there can be no solutions that do justice to everyone; there will always be emergency solutions. It is important, however, that the state remains aware of one of its most essential tasks even in such a situation, namely to provide education for children and young people.

A very frustrated mother of three school-age children points out in an open letter to the Bavarian Ministry of Culture and the press that the economic and industrial sectors present their situation in all the media, but there are those who have "no professional association and no lobbyists, for whom almost no-one raises their voice in this country, [and they are] the children. [...] We are guilty of our children". Parents ask themselves why soccer matches are made possible and why immense sums of money are put into the car industry, for example, and not into the needs of children, who will shape the future of our society.

The above remarks have shown that it is not enough, and even harmful for all concerned, for politicians to rely on shifting education to families using digital media and assume that their political mandate has been fulfilled. Even in the face of a virus epidemic, there can and must be no question of replacing location-bound instruction in social interaction with digital media.

The Ministry of Education and Cultural Affairs of Lower Saxony has published a guideline for "School in Corona Times 2.0". Three scenarios are described which are to be used as a basis for further planning by all schools in Lower Saxony. Scenario C deals with the situation "Quarantine and Shutdown". In case of a new outbreak of infections, the focus is on learning at home. This guideline states: "It is the task of all teachers to instruct their students in learning at home, to accompany and support them - this applies especially to the care of students with special educational needs" (Lower Saxony Ministry of Education, 2020, p. 11). However, there is no reference to the difficulties described above that arise in the parental homes. Obviously, it is assumed as a matter of course that the parents take on the tasks imposed on them by the Ministry of Education, regardless of whether they are able to do so

While this guide provides teachers with guidance on the provision of tasks and materials, communication with students, feedback and performance assessment, it does not address how teachers, parents and students should do this. On the other hand, it says:

Learning with digital media offers particularly good opportunities for distance learning. In particular, the use of learning platforms and especially video conferencing has proven its worth and should be used wherever possible and appropriate. Depending on age, students can be offered a digital morning circle, for example (...) (loc. cit., p. 13).

The Ministry of Education and Cultural Affairs ignores the problems mentioned above, such as the lack of technical equipment in schools and homes, the incompatibility of work and home schooling, etc.

The Minister of Education and Cultural Affairs of Lower Saxony, G. H. Tonne, admitted in his welcome address to this guide

that school is more than just teaching. It is always about knowledge transfer and personality development. The joy of school is closely linked to the personal relationships of the students -

as well as with the teachers and employees. And for this, too, space is needed to work through the experiences made during the Corona pandemic, for creativity, to live it out, to let off steam, creative breaks and lots of movement in school (...). School can be very diverse - and should remain so" (loc. cit., p. 3).

But unlike most other branches of the economy, no money is invested in this. Education in Germany is apparently still considered less worthy than any economic factor and is still not seen sufficiently as an essential social resource.

We should learn the following lessons from experience to date:

- Give children, young people and parents a voice even in a pandemic, discuss their situation in public and force politicians to look for child-friendly solutions.
- Classes must be reduced in size and school buildings must be rebuilt in such a way that distance can be maintained in a time of pandemic and that sufficient opportunities are available at all times to comply with hygiene rules. For example, containers could be erected in the schoolyards to create space and more staff could be hired to care for and supervise children and young people.
- Especially teachers and educators should be tested for the virus as often as possible to prevent quarantine and homeschooling for non-infected students.
- Creative solutions must be found to enable young people in particular to meet with peers in the event of a necessary lockdown.
- Curricula must be revised accordingly and content that is not absolutely necessary to build up knowledge (e.g. in foreign languages) must be deleted, so that all pupils have a chance of success even in times of reduced attendance.
- All teachers must acquire certificates proving that they are able to integrate digital media effectively and meaningfully into their teaching in the manner described above.
- More creative learning platforms tailored to the individual child and educational content must be developed.
- More financial resources must be made available by the federal government to equip all teachers and students, and the bureaucratic hurdles for submitting applications must be reduced.
- School administrations must prepare for exceptional situations such as pandemics and develop appropriate concepts in cooperation with educators, psychologists, sociologists and virologists.
- Responsible persons in educational institutions and administrations must be appointed to develop concepts even in times when no pandemic dominates our lives in order to always be prepared for this emergency.

One positive effect of this current exceptional situation is that probably most parents of school-age children and adolescents have become fully aware of the importance of institutionalized and professionalized education and training. It is possible that, despite all justified criticism, parents will see school more positively in the future and will be better able to assess what teachers and the administration are doing.

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