# Rising educational inequality among Dutch students

COVID-19 and its consequences for students in primary and secondary education

Tilburg University Policy brief Melissa Balla

## **EXECUTIVE SUMMARY**

The Netherlands was technologically reasonably well prepared for the pandemic, yet educational inequality seems to be increasing. Primary and secondary school students from underprivileged households are particularly affected. They are the ones with a relatively large learning loss. The reasons for this lie in the differences in parental involvement in the home education of children from different socioeconomic backgrounds. Due to various circumstances, children from privileged families can be better supported in receiving education from home compared to children from underprivileged families. The role of schools in the increasing educational inequality remains unclear. The future will show to what extent learning loss ultimately occurred, whether the children of disadvantaged households also must deal with income inequality later in life and how inequalities have developed worldwide. Finally, there are several recommendations for policies to reduce the educational inequality gap, such as; providing extra education, paying attention to the vulnerable students, deploying effective interventions and taking into account the indirect factors such as the socio-emotional skills of students. In addition, more research can be done on the role of schools.

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## 1. INTRODUCTION

The consequences of the pandemic are being felt all over the world in social, economic, political and educational fields. Therefore, it is safely to say that the pandemic has gripped the world [4]. Lockdowns were implemented in the Netherlands and in many other countries. As a result, online education became the new form of daily education. The Netherlands has an equivalent school funding system and fast internet access [4]. This gives the impression that the Netherlands is reasonably well prepared for online education. But in practice this may be not entirely the case. The Netherlands experienced a first lockdown of approximately 8 weeks and a second lockdown of 7,5 weeks [7]. Already after the first lockdown of only 8 weeks, research showed that there was a learning loss among students in primary and secondary education [2, 4, 13]. The most notable part of the ongoing learning loss is that it occurs mainly among students who come from disadvantaged households '(e.g. low-income households, low parental educational level)' [13]. These students already had fewer educational opportunities before the pandemic. Consequently, it seems that children from more disadvantaged households are now even in a more disadvantaged position in terms of their educational opportunities [4, 13]. The pandemic appears to be widening the educational inequality gap.

## 1.1 What is meant by 'learning loss'?

The definition of learning loss lies in all forms of loss of knowledge or certain skills. This also applies to certain deficiencies in the study of students that lead to changes in study progress [8]. This means that the learning loss already existed before the pandemic, for example due to the long summer vacation. This is also known as the 'summer learning loss'. But since the lockdowns during the pandemic, learning loss has increased and is also strongly linked to educational inequality in society [9, 8]. This is because, learning losses differ given the socio-economic background of students [1].

Since the pandemic, schools have been forced to close their doors for a certain time. Subsequently, students were forced to follow education from home. As a result, learning loss is increasing due to various impacts of the pandemic:

Students spend less time in learning when schools are closed [3].

Students spend more time at home, which can cause more stress and negatively affect their focus on schoolwork [3].

Students experience less interaction with fellow students, which can reduce their motivation to participate in learning activities [3].

## 1.2 The Dutch education system

In the Netherlands people have the freedom to found schools and thus to participate in the education system. Around 70 percent of schools in the Netherlands are owned by private school boards [11]. The private schools often have a religious background. For example, most schools have a Protestant or Catholic background. The government plays a role here by financing schools. The private schools also must follow the national curriculum. The remaining schools consists of public schools established by the local government [16]. A difference between private and public schools in the Netherlands is that public schools must accept all children, while private schools are allowed to refuse children if they do not fit within the identity of the school [10].

Parents have the right to decide for themselves which school their children attend either a private or public school [11]. When children enter the education system, they first attend primary school. When pupils have completed primary school, they go on to secondary education. Within secondary school, students can be divided into three different trajectories, namely 'VMBO', 'HAVO' or 'VWO'. After secondary school, they move on to academic education or vocational education [12]. When children move from primary school to secondary school, it is believed that the choice of the track they will follow should be based on their abilities. Although it is observed in the Netherlands that primary school pupils with comparable scores on their final tests follow different tracks. Children of highly educated parents have a greater chance to follow tracks at an academic level, such as HAVO or VWO rather than children of less educated parents. While these children have comparable scores on the final exam [15, Figure 1].



*Figure 1.* socio-economic status and advice Source: Van de Werfhorst, 2014.

# 2. STATE-OF-THE-ART OVERVIEW

A limited number of research have now been published as the pandemic only started 2 years ago. Most of the studies in the Dutch context were written after the first 8-week lockdown. In addition, a lot of research is still being done. Moreover, most of the available research in the Dutch context focuses on primary school or secondary school students. These students are still young and therefore even more dependent on their families when it comes to their education [13].



## 2.1 Inequalities in opportunities and outcomes

Since the pandemic, students from lower-educated households have experienced 60 percent more learning loss compared to other students living in the Netherlands [4, figure 2].

This group experiences fewer educational opportunities than others. Educational opportunities refer to circumstances over which a person has no control [6]. Characteristics such as the socio-economic background of the students play a role in this [5]. Inequalities in educational opportunities can also lead to inequalities in educational outcomes [5, 6, 14]. In this case, Dutch students from lower-educated households generally have fewer educational opportunities than others and therefore also run the risk of poorer educational results [4].



*Figure 2.* Parental education and learning loss Source: Engzell, Frey and Verhagen, 2021.

# 2.2 Investment taking place at school versus home 🏥 🏫

According to Dutch empirical research, pandemic shutdowns have been associated in various ways with investments in education that takes place at school and at home [7]. School closures have a direct effect on investment that take place at schools. Here, the investment is less because schools are closed more often. There is then an indirect effect of school closures on investment that take place at home. This increases as children spend more time at home. Thus, parents play an important role in home education. The direct effect of school closures on investment that take place at schools applies to everyone, but the investment that take place at home varies among students from different socio-economic backgrounds [7].

## 2.3 Parental involvement among students from different SES

It was explained in the section above that the amount of investment that take place at home differs between students from different socio-economic backgrounds. But how are these differences present? Current Dutch studies emphasize several factors that influence the extent to which parents are involved in their child's education [2, 7, 13].

## Time at home

Parents with a higher socio-economic status have more time to work from home compared to parents with a lower socio-economic. This gives them more room to help their child with schoolwork [7, 13].

## **Cognitive skills**

Parents with a higher socio-economic status generally have more cognitive skills to help their children with their schoolwork compared to parents with a lower socio-economic status [13].



**Figure 3.** Differences in confidence to help Source: Bol, 2020.

## Confidence

Parents with a lower socio-economic status have less confidence in their own abilities to support their children in their schoolwork compared to parents with a higher socioeconomic status [2, 13, figure 3].

## **Quiet places**

Parents with a higher socio-economic status often have larger houses and therefore more space for quiet places where children can work on their schoolwork compared to parents with a lower socio-economic status [2, 13].

#### Resources

Parents with a higher socio-economic status can afford material resources such as computers or practice exams to a greater extent compared to parents with a lower socio-economic status [2, 13].

## 2.4 The role of Dutch schools in home education

In addition to the differences in parental involvement, research also shows that there are differences in the involvement of Dutch schools in home education. This mainly concerns the extent to which schools communicate clear education-related information to parents and to what extent teachers check students' homework [2]. Although schools generally pay extra attention to children from more underprivileged households, a Dutch study finds that students from the academic track (VWO) receive more structured educational programs and online courses rather than children from the vocal track (VMBO). However, these differences cannot be linked to the socio-economic background of students [2]. In conclusion, Dutch studies mainly focus on the role of parents when it comes to educational differences between students of different socio-economic backgrounds. This may be the case because schools seem to play a much smaller role in this [2].

## 2.5 Learning losses among Dutch students from disadvantaged households

It was discussed how learning losses can differ between students from different socio-economic backgrounds. Now the question is, to what extent is there a learning loss among students from disadvantaged households? To answer this question, several studies have been conducted in the Netherlands. Different studies indicate slightly different results. After the first lockdown, a Dutch study showed that the learning loss among all Dutch students is generally equal to the 8 weeks of the lockdown [4].

Another Dutch study showed that the general learning loss is greater than the 8 weeks of the lockdown, namely around 10 weeks [13]. Both studies emphasized that the learning losses are much greater among students from disadvantaged households [4, 13]. However, these studies were conducted after the initial lockdown. A study conducted after both lockdowns found that Dutch students had a total of 17 weeks of learning loss for reading, 12 weeks for math and 6 weeks for spelling. In turn, they also reported that this learning loss is greater for students from underprivileged households [7, figure 4, 5 & 6].



*Figure 4.* Trends in learning growth - reading Source: Haelermans et al., 2021.



*Figure 5. Trends in learning growth - maths Source: Haelermans et al., 2021.* 



*Figure 6. Trends in learning growth - spelling Source: Haelermans et al., 2021.* 

The general conclusions of several Dutch studies published so far are consistent; although the Netherlands was well prepared for the pandemic compared to other countries, there is especially a large learning loss among students from disadvantaged backgrounds [2, 4, 7, 13].

# 2. IMPLICATIONS FOR THE FUTURE

Many studies on learning loss are still ongoing. In the future, it will become clear what the long-term impact of learning loss is, especially for disadvantaged students, and how inequalities are thereby perpetuated. Existing research is concerned about the long-term consequences of learning loss for vulnerable groups [4, 7]. Some expectations about the long-term consequences are explained below.

#### **1. Learning loss**

The question is whether the learning loss in the Netherlands will increase further due to possible further disruptive education, whether the learning loss will remain stable or whether the learning loss will be reduced through appropriate interventions.

#### 2. Income inequality

In the life courses of underprivileged students, it can be speculated that students from disadvantaged households will also face income inequality later in life [4]. Learning loss does not promote obtaining education, meaning that underprivileged students may be more involved in lower-income jobs later in life than students from privileged households.

## 2. Country differences

Studies already show that there are differences between countries when it comes to learning loss. For example, the less well-prepared countries experience a greater learning loss among students than the better-prepared countries such as the Netherlands [4]. In the long term, inequalities at the global level will also become apparent.

## 3. RECOMMENDATIONS

Research shows that vulnerable students are the most left behind due to the corona crisis. It is important that policies specifically target this group to reduce the educational inequality gap. Some policy recommendations are:

#### 1. Providing additional education

There must be opportunities to follow extra education, especially for students in disadvantaged positions. As a result, efforts are being made to absorb the learning loss that is especially present in this group. This can be arranged in several ways. One way is to extend the school days, for example by offering education during the summer holidays. The government can support summer schools in this by making specific material resources available. In addition, it is possible to provide educational support outside of regular school hours by making use of tutors.

### 2. Keep the focus on the vulnerable students

As mentioned before, in order to narrow the gap, it is important to focus mainly on students from disadvantaged households. Policy can keep the focus on this group by making extra money and resources available for schools with more students from disadvantaged backgrounds [7]. In addition, it must be ensured that this target group can make use of existing interventions. This means that the incentive of parents to register their children for certain interventions plays no or only a small role. In this way students are less dependent on the abilities of their parents [2, 7].

#### 3. Effectiveness of interventions

To ensure that money is mainly spent on drawing up effective interventions, the interventions must be evidence-based as much as possible. One aspect of this is the intensity of additional training. For example, some scholars indicate that just one hour of tutoring per week makes no significant difference. While tutoring every day in small groups or extended school days such as summer programs seem to be quite effective [7].

#### 4. Indirect factors

In addition to the focus of policy aimed at education, attention can also be paid to the development of policy aimed at promoting the socio-emotional skills of students. The socio-emotional skills also impact the learning process of students [7]. Research in psychology and pedagogy could be used to develop policies aimed at promoting these skills.

#### 5. Research

Furthermore, research plays an important role in creating appropriate interventions. Research is still ongoing as the lockdowns are quite recent. It is clear that students from underprivileged households suffer more from the corona crisis [2, 4, 7, 13]. In this case, Dutch research mainly focuses on the role of parents, which is a very important aspect in this situation [4, 7, 13]. But research could expand into the role of schools in educational inequality during the pandemic to find out how schools play a role in this. In this way, if necessary, appropriate interventions can be developed aimed at the role of schools in educational inequality. More research is also needed to determine which interventions have been effective so that long-term work can be done to address learning loss in students. In conclusion, the government should encourage the development of more research.

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