

Belgium (Flemish)

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Introduction

Overview of Education System

The Belgian Constitution guarantees all children the right to education.¹ Belgium is a federated country of which Flanders is the northern, Dutch-speaking part. The Flemish Government has its own Education Administration, consisting of one Department, three Agencies, and the Education Inspectorate. Headed by the Minister of Education, the Administration supervises education policy for all levels of education: preprimary, primary, secondary, and tertiary, for both initial and adult education.

Preprimary education or Kindergarten is available for children ages 2.5 to 6. Even though preprimary education is not compulsory until September 1 of the year in which children turn 5, almost all children in Flanders start attending preprimary school sooner.² Compulsory education continues for a maximum of 13 school years or until the age of 18. Until age 15 or 16, this education must be full-time. After that, a small share of students opts for a part-time schooling program (a full-time combination of part-time study and part-time work), while the majority of students continue full-time education. Compulsory education does not necessarily require attendance at a school; homeschooling is an alternative that can be approved as well.

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The Flemish education system can be characterized as relatively decentralized.³ Freedom of education is a constitutional right. The Flemish Government does not regulate education processes and methods. It only imposes the “what,” not the “how.”

The Flemish Parliament defines the attainment targets (the “what”). These attainment targets are minimum goals to be reached. With respect to reading literacy, in summary, they state that by the end of primary education, students need to be able to obtain, structure, and review information from different written sources.

The responsibility for the quality of education (the “how”) lies mainly with each school and its teachers. Individual schools make pedagogical and didactical decisions. This means that they are free to choose which teaching methods to use based on their own philosophy or education vision. They can also determine their own curriculum and timetables and appoint their own staff. Most schools in Flanders do not undertake this endeavor fully on their own because they are part of an education association of schools (e.g., Catholic schools, schools organized by a town or province) or they belong to the group of public Flemish Community schools (GO! Education). Their respective “umbrella organizations” support school teams in terms of logistics, administration, and pedagogy.

There is no official policy on reading literacy in particular, but the Education Administration does ask that all publicly funded or subsidized schools (i.e., almost all schools) have a general policy on language. This language policy is defined as “the sustained and strategic attempt of an entire school team to address the linguistic needs of students in order to foster their (language) development.”⁴ Depending on the school’s focus, this school language policy can include interventions related to reading comprehension.

Use and Impact of PIRLS

The first time Flanders participated in PIRLS was in 2006. In general, the PIRLS 2006 findings received little public attention in Flanders. Some information about the study was made available to the participating schools, policymakers, and education researchers, and a few newspapers and radio stations reported about the study’s findings to the general public. In general, the results were deemed satisfactory. Yet later, the fact that only a small percentage of students were positioned as advanced readers attracted commentary in several journals. This led to actions from various groups, such as parents of gifted children, aimed at influencing education policy.

The second time Flanders participated in PIRLS was in 2016, 10 years later. The PIRLS 2016 results showed a significant decrease in the reading performance of Flemish students in all subgroups (e.g., both high and low achievers, students at risk or not) compared to 2006. For the first time, Flemish students also performed significantly lower than students in other Western European countries. This outcome was considered alarming. It was reported by all Flemish newspapers and news stations and received much attention for a longer period of time. In fact, to

date, the media, policymakers, and other stakeholders still mention the disappointing PIRLS 2016 results when they discuss aspects of education in Flanders.

Several hypotheses were suggested to explain the severe decline in reading performance. Among them were the relatively late start of reading comprehension instruction in the Flemish curricula, issues related to teacher education, and issues with reading comprehension instruction. In order to rule out several of these hypotheses, a follow-up study was conducted in which the exact same students who participated in the PIRLS 2016 cycle were retested in 2018, when they were at the end of primary school. This study revealed that Flemish students do perform better at the end of primary school than in fourth grade, but the increase in their reading comprehension performance between fourth and sixth grade is not as large as can be expected based on other studies.⁵ In another follow-up study, the Flemish Inspectorate conducted a classroom observation study to assess the quality of reading comprehension lessons. The results showed that there is still much room for improvement in the teaching of reading comprehension in Flemish classrooms.⁶ The results of PIRLS 2016, together with the results of the Programme for International Student Assessment (PISA), are also often named as one of the reasons why Flanders has started to develop central tests, which will be obligatory for all schools (see the Monitoring Student Progress in Reading section).

Apart from follow-up studies, several other initiatives were developed to turn the tide. For instance, two multiyear professionalization programs (*Prioritaire nascholing* and *Lezen op school*) were launched and funded by the Ministry of Education to promote reading comprehension instruction and the development of school reading policies. Another initiative was taken by the Flemish Education Council (VLOR, *Vlaamse Onderwijsraad*), the strategic advisory board in the field of education. VLOR commissioned a review study by researchers of KU Leuven and Ghent University (two Flemish universities) on effective practices for reading comprehension instruction. This resulted in a scientific report⁷ and a practical guide⁸ for schools and pedagogical consultants. Thirdly, in 2018, as a direct result of PIRLS 2016 results, the Union for the Dutch Language (*Taalunie*, which develops and promotes policy on Dutch in the Netherlands, Flanders, and Suriname) assembled the Language Council Reading Comprehension (*Taalraad Begrijpend Lezen*), tasked with developing an action plan for reading comprehension and making specific recommendations to improve the teaching of reading comprehension in Flanders and the Netherlands. Finally, in 2021, a Reading Offensive was launched by the Flemish Government, again in response to the declining results of PIRLS as well as PISA. Based on a list of action points⁹ drawn up by an expert group, the Reading Offensive will continue until 2030, with several initiatives aimed at improving the reading motivation and reading comprehension skills of children in Flanders.

The Language/Reading Curriculum in Primary Grades

Primary schools must pursue the attainment targets set by the Flemish Parliament. These attainment targets describe the knowledge, skills, and attitudes the education authorities consider necessary and feasible for the intended student population. They are therefore minimum goals.

The first set of attainment targets was developed in 1997. In 2010, they were (partially) revised for the first time. A new revision is currently being considered to meet the needs of the 21st century.

The current primary school attainment targets for Dutch and for reading in particular are described below. Apart from Dutch, the Flemish curriculum also includes foreign languages. In primary school, French is mandatory for all students in Grades 5 and 6. Schools can choose to offer it starting in third grade or, in the Brussels-Capital Region, starting in first grade.

The attainment targets for Dutch are aimed at developing listening, speaking, reading, and writing skills in all students, together with knowledge of (meta)linguistic strategies, linguistic knowledge (e.g., spelling, pragmatics), and (inter)cultural knowledge and positive attitudes toward (using) language. Students must be able to:

- Transmit information orally and in written form, and incorporate various oral and written messages from others into relevant situations in and out of school
- Think critically about language and about their own and others' use of language
- Know which factors are important in communication and take them into account

Students also must be willing to:

- Use language in different situations to develop themselves and to give and receive information
- Think about their own reading behavior
- Have an unbiased attitude toward linguistic diversity and language variation
- Find pleasure in dealing with language and linguistic expression

Reading instruction in particular is characterized by a shift from a focus on basic reading skills in the first years of primary education to reading comprehension skills and reading for learning in the final years of primary education. In first grade, reading instruction focuses on the acquisition of decoding skills (technical reading) and includes short stories and activities aimed at the development of reading comprehension. From that moment on, instruction in comprehension gradually and systematically increases to develop autonomous and critical readers. The final objectives for Dutch reading in primary schools are as follows:

- Students are able to find information (level of processing = description) in
 - instructions for a range of activities intended for them,
 - the data in tables and diagrams for public use, and
 - magazine texts intended for them.

- Students are able to arrange information (level of processing = structuring) that is found in
 - school and study texts intended for them and instructions for school assignments; and
 - stories, children’s books, dialogues, poems, children’s magazines, and youth encyclopedias intended for them.
- Students are able to evaluate information based on their own opinion or on other sources (level of processing = evaluating) such as
 - letters and invitations intended for them, and
 - advertising texts that are directly related to their own world.

To obtain these attainment targets in all students, school boards have the autonomy to develop their own curricula. They do so for each grade or for each stage of two grades. In fact, the curriculum is a required guide for primary education. The Decree on Elementary Education of February 25, 1997 (Article 8) states: “On the basis of a pedagogical project, schools must create an educational and learning environment in which pupils can experience a continuous learning process. This environment must be adapted to the development progress of the pupils.” The individual school curriculum must be approved by the government upon the advice of the Inspectorate. The attainment targets must be central in these curricula and they also must be incorporated clearly in work plans and learning materials.

As explained above, in practice most schools take advantage of the curricula as elaborated by their educational umbrella organization or by the central services of Flemish Community education. These organizations have developed a comprehensive curriculum and accompanying didactic suggestions aimed at achieving the attainment targets.

Note that the above applies to mainstream primary education. Students in special education have an individualized curriculum that is adapted to the needs and possibilities of each student. The objectives are selected by the school autonomously, usually based on the attainment targets of mainstream primary education.

Professional Development Requirements and Programs

Teacher Education Specific to Reading

Initial teacher education in Flanders at the bachelor’s level (in addition to the educational master’s program) includes a three-year program for teachers of preprimary school, a distinct three-year program for primary school teachers, and a third program for teachers in the first phases of secondary school. Each of these programs includes general teacher education courses as well as courses linked to specific subject areas. However, there is no teacher education program specific to teaching reading in preprimary or primary schools. This topic is covered in the general language education courses that are part of the aforementioned three-year programs.

Requirements for Ongoing Professional Development in Reading for Teachers

Flemish schools and teachers are not subject to any requirements in terms of ongoing professional development in reading. However, different options are available.

For one, the educational umbrella organizations have their own Pedagogical Guidance Services (financed by the government) to provide schools with education and methodological support. For most schools, these are among the most important partners for quality assurance. The pedagogical counselors attached to these Pedagogical Guidance Services offer support to schools within their network, including in-service training, support for self-evaluation, and quality assurance.

In addition, in the 2020-2021 academic year, the Ministry of Education started funding several new initiatives to enhance the competencies of teachers to teach reading comprehension. These training programs are organized by certified teaching colleges or associations specialized in teacher training. Flemish schools could volunteer to participate and were selected by the program organizers. An evaluation of both projects is currently taking place, and the results are expected in 2022–2023.

Many other training organizations offer various activities to enhance the competencies of teachers. They also can support professional development in teaching reading but often are not funded by the government.

Monitoring Student Progress in Reading

Since there is freedom of education and schools decide on their pedagogical and didactical policies, schools themselves are also largely responsible for monitoring student progress in reading. The paragraphs below first discuss monitoring actions taken by the Ministry of Education and then describe actions taken by schools.

The Flemish Inspectorate acts as an independent professional system of external supervision. The Inspectorate visits each school once every six years to examine whether the attainment targets are being reached and whether the developmental objectives and cross-curricular attainment targets have been pursued sufficiently.

In addition, since 2002, the Ministry has commissioned yearly assessments from the Policy Research Centre for Test Development and Assessments (*Steunpunt Toetsontwikkeling en Peilingen*). Each year, this center develops two standardized tests, each related to the attainment targets for a specific subject in a specific grade (Grade 6, 8, 10, or 12). The center then administers these tests in a representative sample of Flemish schools and analyzes the results. This process provides authorities with an overview of the quality of the Flemish education system based on reliable and objective student performance data. In 2007, 2013, and 2018, the assessments focused on reading in primary education.

From academic year 2023–2024 onward, the Flemish (language) assessment policy will change. New, centralized assessments will no longer take place in a sample of Flemish schools; instead, they

will be mandatory for all Flemish schools. Also, the same subjects will be tested every year: Dutch and mathematics. The tests currently are being developed by the Policy Research Centre for Central Tests in Education (*Steunpunt voor Centrale Toetsen In Onderwijs*), a consortium of researchers of all Flemish universities and several colleges for higher education. Reading comprehension will be a focal point in the assessment framework.

Schools also are encouraged to collect external data on their students' achievements. They can compare these data with their own results (e.g., scores on tests they developed themselves and/or tests provided with the textbooks they use) to obtain a more objective assessment of their achievement as a school.

Currently, there are two mandatory initiatives:

- Since academic year 2018–2019, all primary schools have been obliged to administer validated tests that cover at least three learning areas of their choice (e.g., Dutch, mathematics, etc.) at the end of sixth grade (i.e., the end of primary education). Schools can choose which validated tests they use, with the large majority selecting tests from a list of recommendations provided by the government.
- Starting in academic year 2021–2022, the KOALA test, designed to screen the language ability of 5-year-olds as they start compulsory education (often after two to three years of preprimary schooling), is mandatory in mainstream education (except for non-Dutch-speaking newcomers).

The Ministry of Education also supports schools in monitoring their own quality in different ways, for instance through an overview of “tests for schools” on its website. For primary school, the listed tests are:

- The Start of Primary Education Language Skills Screening test (known by its Dutch acronym, SALTO), a listening test to screen the Dutch language proficiency of students starting first grade. This test is strongly recommended for all schools.
- Parallel versions of tests administered by the Policy Research Centre for Test Development and Assessments (i.e., within the framework of the periodic survey on attainment targets), including a test that assesses the degree to which the school achieves the attainment targets for Dutch reading. These tests are not suited for the assessment of individual students.
- Links to validated tests offered by two umbrella organizations (KOV [*Katholiek Onderwijs Vlaanderen*, or Catholic Education Flanders] and OVSG [*Onderwijsvereniging van Steden en Gemeenten*], or Education Association of Cities and Municipalities), along with a report on their government-commissioned validation by an external party. These tests assess many different domains, including Dutch reading, in sixth grade and (in the case of KOV) fourth grade.
- A toolkit for broadly evaluating Dutch language skills. This toolkit contains advice on how to identify strengths and weaknesses at different points in time and in different situations, as well as extensive descriptions of many suitable tests.

When it comes to monitoring students' progress in spelling and technical reading skills (i.e., decoding skills and reading fluency), most schools use the Flemish version of the student monitoring system of the Dutch organization CITO (*Centraal Instituut voor Toetsontwikkeling*, or the Central Institute for Assessment Development) or an alternative (e.g., VCLB [*Vrij Centrum voor Leerlingenbegeleiding*, or Free Centre for Student Counseling]).

Special Reading Initiatives

The Flemish Ministry of Education has a long tradition of emphasizing the importance of language education. Since the 1990s, schools have received extra funding to support the acquisition of Dutch in students with an immigrant background that do not have Dutch as their home language. During the 2000s, this policy widened to support all students who are at risk of underachievement (e.g., also children of parents who have had little or no schooling). Since 2007, the implementation of a school-specific language policy has been strongly recommended to all schools.

For reading comprehension in particular, schools and teachers can rely on the following notable national initiatives or organizations:

- Two government-funded teacher professionalization initiatives to promote reading instruction (see above)
- CANON Cultuurcel, an organization in the Department of Education that awards an annual prize for “best book teacher” (teachers making great efforts to work with children’s books in class) and that hosts cultuurkuur.be (Culture in Schools Starts Here), which provides an overview of activities, organizations, and support for educational cultural activities
- Cultuurconnect, an organization that supports and guides cultural institutions (including libraries) as they achieve their goals in our digital society. It offers support for library websites and catalogs, Bieblo (a game that suggests suitable books to children), Bibster (a library game for [class] groups), Fundels (digital, interactive children’s books), and more.
- Everybody Reads (*Iedereen Leest*), a nonprofit organization founded by the Flemish Government with initiatives such as
 - boekenzoeker.be (book searcher), a website that stimulates reading by assisting children and teenagers in choosing books
 - Bookstart, aimed at enhancing the use of children’s books at home during early childhood
 - the month of youth books, an annual campaign that focuses on increasing reading enjoyment
 - the reading jury, in which a group of children ages 4 to 18 get a list of books to review and sometimes meet in groups to talk about books
 - the week of reading aloud, an annual campaign in which adults read books to children

- The Language Union, a Dutch-Flemish organization that takes or supports several initiatives that promote the Dutch culture and education in Dutch, including initiatives aimed at reading in particular (e.g., the aforementioned Language Council Reading Comprehension)
- Flanders Literature, an autonomous government institution that aims to facilitate a widely accessible literary landscape, for instance through the website auteurslezingen.be, a tool for booking subsidized author visits to schools, libraries, etc.
- The aforementioned Reading Offensive for Flanders
- Many other initiatives offered by libraries, research institutes, education publishers, and others

Response to COVID-19 Pandemic

Teaching and Learning During the COVID-19 Pandemic

Between the start of the pandemic (March 2020) and the end of the Flemish data collection for PIRLS (June 2021), Flanders has had three lengthy periods of time that could be described as lockdowns, with citizens being required to stay at home in most circumstances, and closure of all nonessential shops.

Schools only were closed by the national government during the first lockdown, from March 16 until May 18. During the first three weeks of this national school closure, i.e., until the Easter holiday, all classes were canceled and schools only were allowed to provide refresher assignments for students. Then for four weeks after the two-week Easter holiday, schools offered remote education, online and through assignments. Given the large amount of freedom that characterizes the Flemish education system, schools decided how to organize remote education. This resulted in substantive differences among schools.¹⁰ From May 18 onward, primary schools were allowed to reopen under strict conditions. Students in Grades 1 to 3 were allowed to go to school every day, whereas students in Grades 4 to 6 only were allowed to go to school two times a week. In addition, class sizes were limited to 14 students. This meant that classes often had to be split in half, which further reduced the number of days students could attend school. All students from all grades were allowed to go to school every day from June 8 onward, but with strict social distancing rules.

For the second and third lockdowns, no national school closings were issued for primary education except for a one-week extension of both the autumn holiday (November 2020) and the Easter holiday (April 2021). This means that students who participated in PIRLS at the beginning of the Flemish testing window had been away from school for three full weeks. Furthermore, individual classes or schools had to close at times because of COVID-19 outbreaks. When these closures occurred, most schools offered online instruction.

Impact of the Pandemic on Student Learning

To date, little information is available on the impact of the COVID-19 pandemic on student learning other than research performed by one of the umbrella organizations (that of Catholic schools) in collaboration with researchers at KU Leuven. They attempted to measure the impact of the pandemic on students' performances on a standardized assessment at the end of fourth grade and at the end of sixth grade. Results indicated that immediately following the first lockdown, the average 12-year-old student had suffered a delay of about six months of schooling. One year later (in June 2021), this delay had increased for Dutch reading.¹¹

The Flemish Ministry intends to use insights from the national assessment of attainment targets of 2021 and international studies such as PISA and PIRLS to try to evaluate the impact of the pandemic.

Policy and Practice Changes

In the past, several studies have indicated that Flemish schools are lagging behind in terms of digitalized education and Information and Communications Technology (ICT) infrastructure.¹² Since the first lockdown, the Flemish Government has provided 60 million euros for digital solutions to facilitate distance learning, provided 15,000 laptops for students in second and third grade of secondary education coming from low-income families, and organized multimedia summer schools. In addition, the Flemish Government recently invested a historic sum of 375 million euros in a major “digital leap” (*digisprong*) for all schools as part of the Flemish Resilience recovery plan.

Impact of the Pandemic on PIRLS 2021

The school closures in spring 2020 caused the suspension of the entire PIRLS 2021 field test. Instead, only five schools participated in a small-scale, largely paper-based pilot study in the fall.

Fortunately, the main PIRLS 2021 data collection could proceed. The preparations were somewhat more complicated than usual, however. For instance, obtaining participation from schools took longer because principals were too busy to consider their invitation or somewhat reluctant to make time for the tests. In about 10 percent of the schools, the ICT test to check school computers' compatibility with the digitalPIRLS system was delayed because of outbreaks of COVID-19 or because the Easter holiday was extended by one week. In some of those schools, technical problems ended up interfering with the data collection. It was also harder to find a sufficient number of test administrators, but this was anticipated beforehand and a longer testing window was planned (so all schools could be visited with fewer test administrators and more room could be made for rescheduling). Test administrators were trained online instead of in person.

The actual data collection became quite complex when several test administrators fell ill or had to go into quarantine, while the high number of quarantined or ill students also required many sessions to be rescheduled or accompanied by make-up sessions. All in all, thanks to the flexibility

and engagement of schools and thanks to additional volunteers who took on the role of test administrator, the amount of data loss due to COVID-19-related absences remained limited.

Suggested Readings

Dockx, J., Van Landeghem, G., Aesaert, K., Van Damme, J., & De Fraine, B. (2019). *Begrijpend lezen van het vierde naar het zesde leerjaar. Herhalingsmeting van PIRLS in 2018 vergeleken met PIRLS 2016* [Reading comprehension from grade 4 to grade 6. Repeat assessment of PIRLS in 2018 in comparison with PIRLS 2016]. Leuven: Center for Educational Effectiveness and Evaluation.

Merchie, E., Gobyn, S., De Bruyne, E., De Smedt, F., Schiepers, M., Vanbuel, M., Verstedden, P., Van den Branden, K., Ghesquière, P., & Van Keer, H. (2019). *Effectieve, eigentijdse begrijpend leesdidactiek in het basisonderwijs. Wetenschappelijk eindrapport van een praktijkgerichte literatuurstudie* [Effective, contemporary reading comprehension didactics in primary education. Scientific report of a practice-oriented literature study]. Brussels: Flemish Education Council.

Policy Research Centre for Test Development and Assessments. (2019). *Peiling Nederlands. Lezen, luisteren en schrijven in het basisonderwijs 2018* [National assessment of Dutch. Reading, listening and writing in primary education 2018]. Leuven: Center for Educational Effectiveness and Evaluation. Retrieved from https://peilingsonderzoek.be/wp-content/uploads/2018/11/Brochure_Nederlands_BaO_2018_DEF.pdf

References

- ¹ The Belgian Constitution. (2014). Retrieved from http://www.dekamer.be/kvvcr/pdf_sections/publications/constitution/GrondwetUK.pdf
- ² Department of Education and Training. (2016). *Onderzoek naar kleuterparticipatie: Eindrapport* [Research on preschool participation: Final report]. Brussels: Flemish Ministry of Education and Training. Retrieved from https://onderwijs.vlaanderen.be/sites/default/files/2021-07/Eindrapport_Onderzoek_naar_kleuterparticipatie.pdf
- ³ OECD. (2017). *Education policy outlook: Belgium*. Retrieved from <http://www.oecd.org/edu/profiles.htm>
- ⁴ Van den Branden, K. (2010). *Handboek Taalbeleid Basisonderwijs* [Manual of language policy in primary education]. Leuven: Acco.
- ⁵ Dockx, J., Van Landeghem, G., Aesaert, K., Van Damme, J., & De Fraine, B. (2019). *Begrijpend lezen van het vierde naar het zesde leerjaar. Herhalingsmeting van PIRLS in 2018 vergeleken met PIRLS 2016* [Reading comprehension from grade 4 to grade 6. Repeat assessment of PIRLS in 2018 in comparison with PIRLS 2016]. Retrieved from <https://ppw.kuleuven.be/onderwijskunde/projecten/internationaal-vergelijkend-onderzoek-naar-leerlingenprestaties/pirls2018rapport1>
- ⁶ Education Inspectorate. (2020). *Begrijpend leesonderwijs in de basisscholen kwaliteitsvol? Sterke en zwakke punten van de huidige praktijk* [Reading comprehension instruction in the primary schools of high quality? Strengths and weaknesses of current teaching practice]. Brussels. Retrieved from https://www.onderwijsinspectie.be/sites/default/files/atoms/files/voi_200318-Rapport_begrijpend_lezen_bao.pdf

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- ⁷ Merchie, E., Gobyn, S., De Bruyne, E., De Smedt, F., Schiepers, M., Vanbuel, M., Versteden, P., Van den Branden, K., Ghesquière, P., & Van Keer, H. (2019). *Effectieve, eigentijdse begripend leesdidactiek in het basisonderwijs. Wetenschappelijk eindrapport van een praktijkgerichte literatuurstudie* [Effective, contemporary reading comprehension didactics in primary education. Scientific report of a practice-oriented literature review]. Brussels: Flemish Education Council.
- ⁸ Gobyn, S. et al. (2019). *Sleutels voor effectief begripend lezen. Inspiratie voor een eigentijdse didactiek in het basisonderwijs* [Keys for effective reading comprehension instruction. Inspiration for a contemporary didactical approach in primary education]. Brussels: Flemish Education Council.
- ⁹ Heyvaert, L. (2021). *Adviesnota een leesoffensief voor Vlaanderen* [Advisory note a reading offensive for Flanders]. Brussels: Department of Education and Training and Department of Culture, Youth and Media.
- ¹⁰ Chénier, M. A., Maldonado, J. E., & De Witte, K. (2021). *De invloed van extra schoolsluitingsdagen op gestandaardiseerde test scores in het zesde leerjaar* [The impact of extra school closing days on standardized test scores in sixth grade]. KU Leuven. Retrieved from <https://feb.kuleuven.be/drc/LEER/in-the-press/invloed-van-extra-schoolsluitingsdagen-26-01-2020.pdf>
- ¹¹ Gambi, L., & De Witte, K. (2021). *The resiliency of school outcomes after the COVID-19 pandemic. Standardized test scores and inequality one year after long term school closures* [Discussion paper series]. Department of Economics, KU Leuven. Retrieved from https://limo.libis.be/primo-explore/fulldisplay?docid=LIRIAS3611628&context=L&vid=Lirias&search_scope=Lirias&tab=default_tab&fromSitemap=1
- ¹² Flemish Government. (2020). *Visienota “digisprong”: van achterstand naar voorsprong* [Notes detailing vision on the “digital jump”: From disadvantage to taking the lead]. Retrieved from https://onderwijs.vlaanderen.be/sites/default/files/atoms/files/VR%202020%201112%20DOC.1424_1QUATER.pdf