OECD Reviews of School Resources:
Flemish Community of Belgium 2015

Chapter 2

Funding of school education in the Flemish Community of Belgium

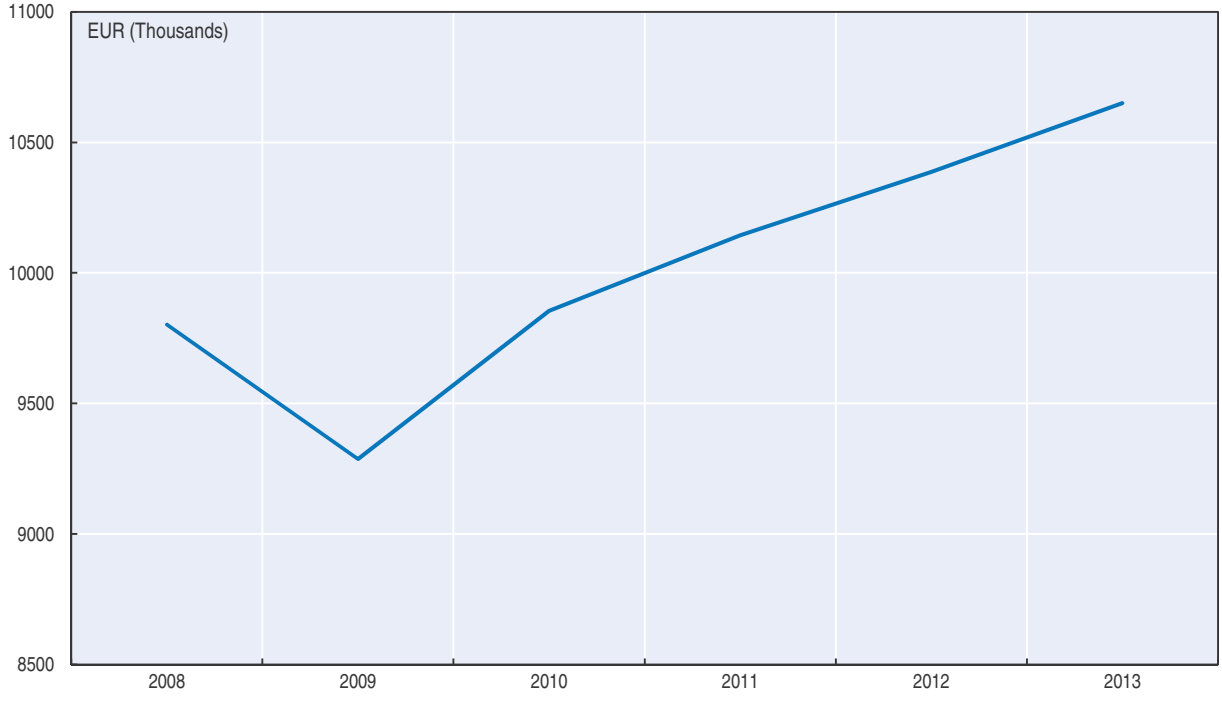
This chapter is about the funding of school education in the Flemish Community of Belgium. It presents the level of resources available for the school sector and the main principles of school funding. It also analyses the structure of the school education budget and provides a detailed description of its three main components: school operating grants, staffing and infrastructure. It examines how the Flemish approach to school funding supports freedom of choice and school autonomy while aiming to provide equal opportunities to schools in responding to the needs of different student groups. The chapter also reviews the availability of information necessary to evaluate the impact of school funding and examines the distribution of funding across levels and types of education, giving particular attention to the differential resourcing of educational programmes in the secondary school sector.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Context

The Flemish Community of Belgium supports a complex school system which performs at a very high standard internationally. The strength of government commitment to Flemish education is reflected by the school budget trend since the global financial crisis of 2008. While the crisis triggered a contraction in spending on elementary and secondary education in 2009 – a fall of 8% in nominal terms – growth had returned by 2010 and has trended upwards since then (Figure 2.1). It is important to note that the drop in the budget of 2009 was partly due to a pre-payment to the operational budget for elementary and secondary education in the previous year and, to a lesser extent, to savings made in 2009.

Figure 2.1. **The Flemish education budget (in thousand EUR), 2008-13**



Source: Flemish Ministry of Education and Training (2013), *Flemish Education in Figures, 2012-13, www.ond.vlaanderen.be/onderwijsstatistieken.*

At the same time, the Flemish school system faces both pressure on budget and pressure on educational performance. Pressure on budget is related to recent demographic trends. Nominal growth in the school education budget has been underpinned by strong demographic growth (Chapter 1). The current strong growth in the elementary school population will eventually flow through to secondary education and reverse the downward trend that has been experienced in recent years (Flemish Ministry of Education and Training, 2013). As funding enrolment growth in secondary school is much more expensive

than funding growth in elementary school (1.7 times the per student cost), this will create further demands on the budget for school funding (Flemish Ministry of Education and Training, 2015).

Pressure on the education system to further improve student performance and equity is created by a combination of factors. Sustaining a high level of commitment to investment in schooling will likely depend on the ability of Flemish schools to produce a continuing high standard of performance and to extend and deepen the benefits of schooling. While the Flemish Community has a highly educated population, educational attainment levels need to rise in line with economic change and achievement gaps between students from different socio-economic backgrounds need to be narrowed. Labour market projections indicate that people with low levels of educational attainment are likely to face increasing difficulties on the labour market, which requires further strategies to reduce early school leaving and enhance qualifications (CEDEFOP, in Flemish Ministry of Education and Training, 2015).

Faced with fiscal pressures and performance pressures, Flemish schools rely on the capacity of the funding model to allocate resources to where they are most needed and where they can have the greatest impact. If the machinery of funding is less than optimal, schools' access to human and financial resources will be constrained and performance impaired. It will be difficult for schools to maintain and extend their efforts to achieve more, especially for children at an educational disadvantage.

The twin pressures of fiscal restraint and performance enhancement are being felt in a context in which the Flemish school population is not only growing, but changing in ways which add further opportunities and challenges. Not only are more children beginning school, but a more diverse range of children in terms of language and family education background are being accommodated. More places in school must be found, but a greater effort must be made to ensure that children succeed. While Flemish secondary schools have an outstanding record of achievement, there are also wide gaps and considerable inequality. The Flemish budget has to tackle these issues as well as managing quantitative growth in enrolment.

The ways in which schools are funded by government should be viewed in the context of participation and performance as well as the need for efficient allocation of resources. If a performance level that is consistently high for *all* populations is the policy objective, this puts pressure on the funding machinery, not only the level of funding. For more value or impact has to be extracted from educational investments. Inefficiencies and inconsistencies work against objectives and waste money. The point is to ensure that funds are allocated in ways which maximise impact.

Features

Expenditure on school education

Overall expenditure on schooling is high in Belgium compared to other OECD and European Union countries. Figure 2.2 shows the cumulative expenditure per student from age 6 to 15 by educational institutions across OECD countries based on information from the OECD Programme for International Student Assessment (PISA). Belgium as a whole is among the ten countries spending the highest cumulative amount per student in this age bracket.

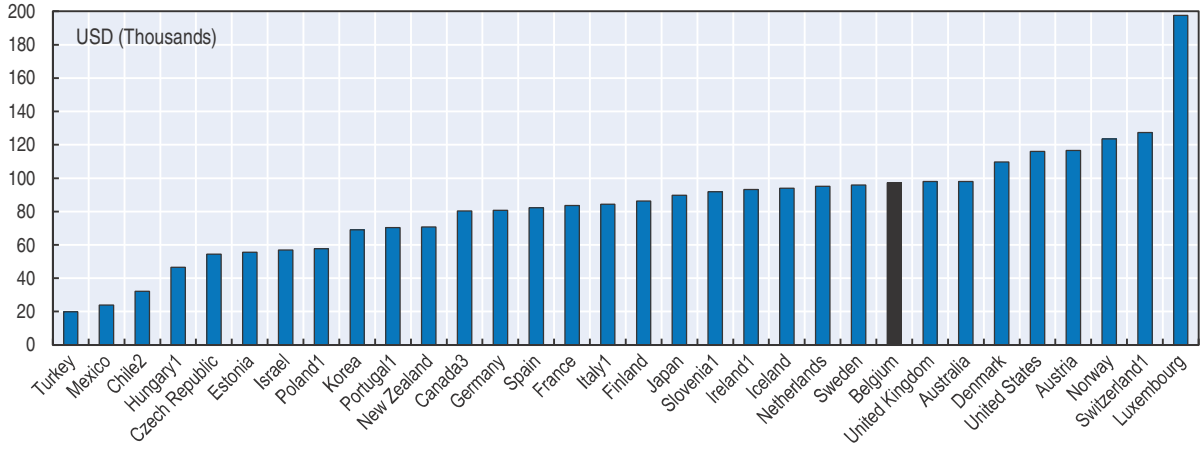
Governance of school funding

Funding of Flemish schools follows the same basic stepwise model for all schools. The general budget is divided among the different federal entities of Belgium, including the Federal Government, based on a ratio. The Flemish Ministry of Education and Training pays the salaries of teaching and non-teaching staff directly. However, funds for operating expenses and minor capital works are channelled through an intermediate body. In the case of Flemish Community (GO!) schools, this is the local cluster of establishments or "school group". In the case of municipal schools, it is local government. In the case of grant-aided private schools, operational funding goes directly to the school board.

Capital funds flow from the Ministry through the Board of Flemish Community schools for Community education and through the Flemish Agency for Educational Infrastructure (AGIOn) for grant-aided public or private schools. Grant-aided schools make a contribution from their own resources to meet capital requirements. These flows are depicted in Annex 2.A1 which analyses each of the separate funding routes by sector of schooling.

Figure 2.2. **Cumulative expenditure by educational institutions per student aged 6 to 15 years, 2010**

Cumulative expenditure in equivalent USD using PPPs for GDP



1. Public institutions only;
2. Data are for 2011;
3. Data are for 2009.

Source: OECD (2013a), *PISA 2012 Results: What Makes a School Successful (Volume IV): Resources, Policies and Practices*, *http://dx.doi.org/10.1787/9789264201156-en*, Table IV.3.1.

In the machinery of funds allocation, the Agency for Educational Services (AgODI) plays a key role, including in collecting and verifying data, calculating budgets, managing relationships with school boards, and providing clear statements to schools regarding the amount of operating resources and teaching hours they generate.

Main principles of school funding

Funding is provided to schools based on certain general principles. All schools, whether public or private, have a legal entitlement to funding. This is intended to fully cover operating costs and salaries. The different legal status of schools – whether public or private, municipal or provincial, elementary or secondary – has no bearing on funding

entitlement. Equality of treatment between Flemish Community education (GO!) and public and private grant-aided education has been enshrined in the Parliamentary Act of 2008, which builds on a longer history of convergence of funding entitlement.

Capital funding is also provided to all schools, regardless of their legal status. However, there are differences in the level of access to public funds for infrastructure. Schools run by the Flemish Community network receive 100% of their capital funding through the Community, while grant-aided public and private schools receive between 60-70% (depending on educational level). The assets created in these sectors are either privately-owned or are the property of the relevant public authority.

Public funding ensures equal treatment for all educational providers (except regarding capital) and aims to ensure equal opportunities for all families by reducing the educational costs of parents to a strict minimum. There are no tuition fees in pre-primary, primary and secondary education. While both elementary and secondary schools levy charges, these are strictly regulated. In elementary schools, the annual levy rises with the age of students – for the 2013/14 school year, it was set at EUR 25 per child aged 2-3 years, EUR 35 for 4 year-olds, EUR 40 for 5 year-olds and also for children of compulsory school age in pre-primary education, and EUR 70 per student in primary education[1](Flemish Ministry of Education and Training, 2015). For extra-mural activities, there was a maximum charge of EUR 410 per student throughout the child's primary school career. In secondary schools, no maximum charge applies. However, schools are required by law to apply cost-control measures, maintain costs at a reasonable level and take into account parental circumstances.

The structure of the school education budget

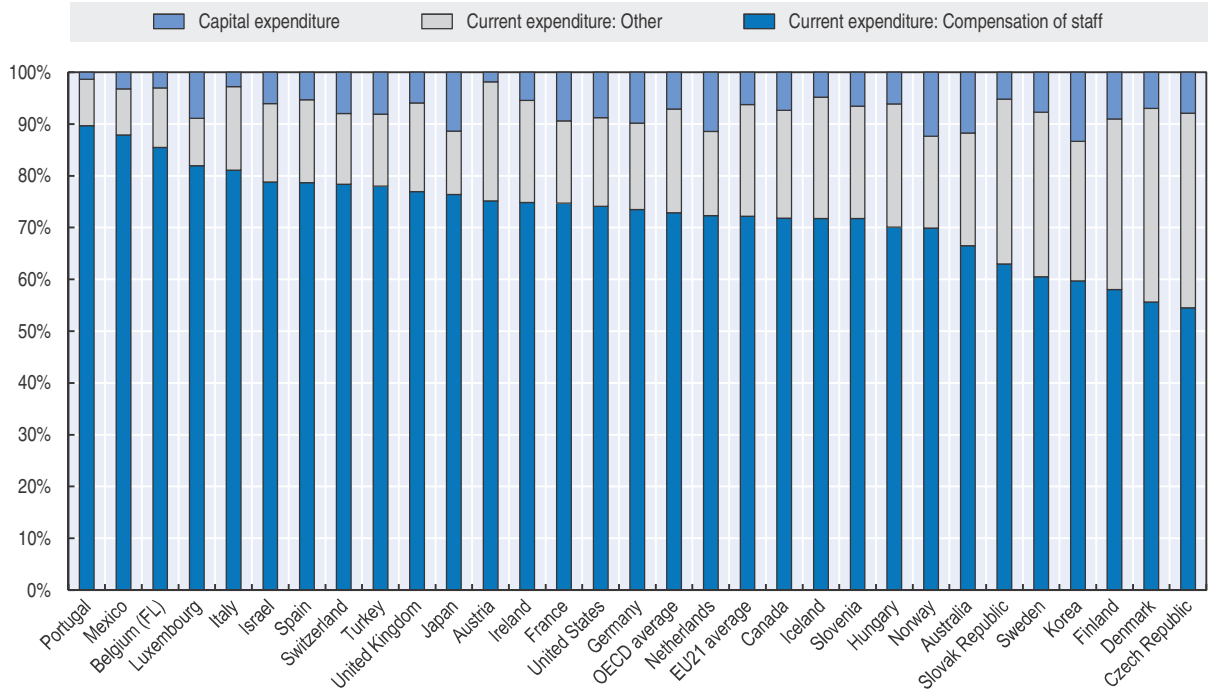
As in other OECD countries, by far the biggest share of expenditure on school education in the Flemish Community of Belgium is allocated to compensation for staff. According to data reported by the Flemish Community to the OECD (2014), staff compensation represented 83.8% in primary education and 85.5% in secondary education. Other current expenditure accounted for around 12 % of total budgets while capital investment contributed 3-5% (depending on the educational level). The proportions for secondary education in the Flemish Community compared to other OECD countries are represented in Figure 2.3. As can be seen from the figure, only Portugal and Mexico invested a higher proportion of their overall budgets in staff compensation at the secondary level.

In the Flemish Community, funds are allocated to elementary and secondary schools under three broad headings: the operating grant (to meet running costs), salaries, and capital. Figure 2.4 analyses the major components of the school budget in the Flemish Community and reports the trends in spending between 2011 and 2013. As can be seen from Figure 2.4, over the last three years, outlays on salaries have grown in absolute terms, but are largely unchanged as a proportion of total outlays as investment (infrastructure spending) has lifted. The increases in salaries during this period do not compare with the 16% increase in capital spending (which nevertheless remains a very small component of total expenditure).

To illustrate the way in which school operating grants and staffing hours are calculated for an individual school, Annex 2.A2 provides an extract and translation of an official letter sent by AgODI to a sample elementary school and Annex 2.A3 provides an abstract and translation of an official letter sent by AgODI to a sample secondary school. The following sections draw from this information and other example letters seen by the OECD review team in order to describe the Flemish approach to school funding.

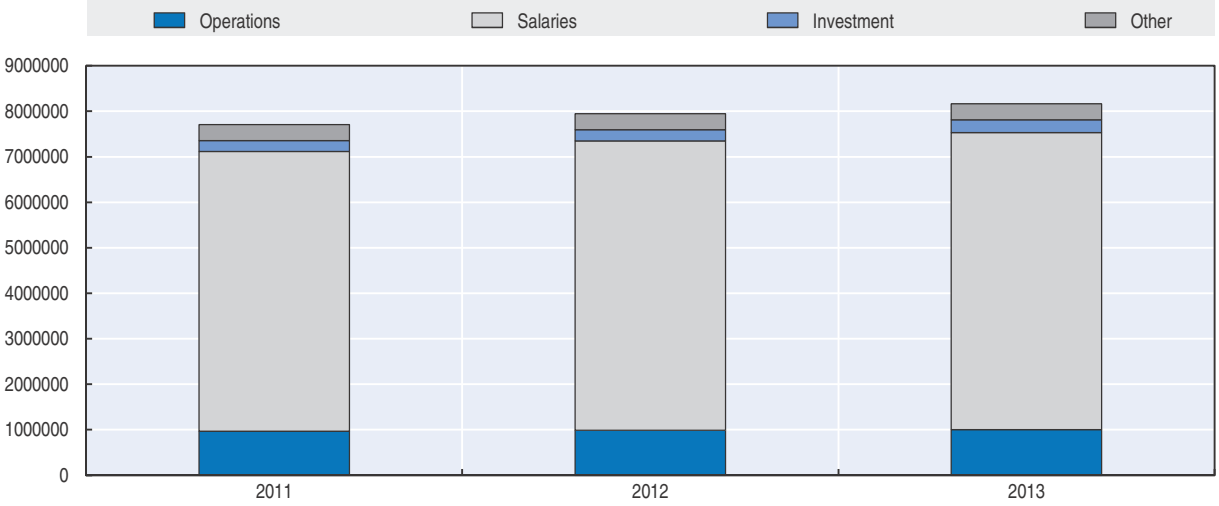
Figure 2.3. **Distribution of expenditure by secondary educational institutions, by resource category, 2011**

In percentage of total expenditure



Source: OECD (2014), *Education at a Glance 2014: OECD Indicators*, *http://dx.doi.org/10.1787/eag-2014-en*, Table B6.1.

Figure 2.4. **Elementary and secondary education: main budget components and trends (in EUR), 2011-13**



Source: Flemish Ministry of Education and Training (2015), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools, Country Background Report of the Flemish Community of Belgium*, *www.oecd.org/edu/school/schoolresourcesreview.htm*, Annex Table 2.3.

The operating grant

The operating grant is intended to cover the running expenses of a school. These include administrative and utility costs, but also a number of fixed costs in programme delivery. While there are differences in the administrative status of schools belonging to the three different umbrella networks (Chapter 1), the allocation of operating funds has been on the same basis since 2008, when the Flemish Parliament ended the older system of differential treatment. As regards operational costs, all schools receive a base grant, adjusted for "objective differences" between the educational networks and weighted by student and school characteristics.

The 2008 approach to operational funding, while treating all schools alike, does recognise two distinctive cost features (referred to as "objective differences") between the educational networks. First, according to the principle of neutrality (Art. 24 of the Belgian Constitution), schools operated by the Flemish Community network are constitutionally obliged to offer freedom of choice. This means that every population centre, whether urban or rural, must be served by a Community school, notwithstanding the small size of schools which results from this obligation in certain localities. Second, every public school (i.e. Community schools and grant-aided public schools) must offer philosophy-of-life courses (official religions or non-confessional ethics) on demand, notwithstanding potentially low numbers in options demanded by parents.

The legal requirements for freedom of choice and openness to different philosophies of life impose higher operating costs on public schools. These costs are taken into account in the operating grant through two "pre-set" budget provisions: i) 3% of the overall budget for school operating grants is set aside and allocated to the Community school network as financial compensation for the obligation of neutrality through which parental freedom of choice is guaranteed; and ii) 4.5% of the budget for school operating grants is allocated to Community education and grant-aided public education as compensation for the obligation to offer instruction in different philosophy-of-life courses. These 4.5% are calculated based on the budget for students qualifying for this difference.

Since 2008, the operating grant also adjusts for social differences between students. This adjustment in the operating grant applies to mainstream elementary and secondary education, but not to special education[2] (see Chapter 3). The weighting of the operating grant is designed to deliver additional support to schools serving disadvantaged students and their communities. In the case of elementary education, this support represents about 14% of the total operating grant and will rise to 15.5% by 2021. In the case of secondary school, the corresponding figures are 10% rising to 11% in 2020 (Flemish Ministry of Education and Training, 2015).

The pre-set budget to compensate for social differences between students is distributed among schools by adjusting school operating grants based on four indicators:

- **the educational attainment of the student's mother,** which is taken to reflect the cultural background of the student;
- **the students' eligibility for a study grant,** which is intended to capture the financial capacity of the student's family;
- **the language spoken at home,** which is taken as an indicator for the linguistic and cultural capital of the student; and
- **the student's place of residence,** which is seen to reflect the social capital of the student.

In elementary education, the overall pre-set budget to compensate for social differences is divided equally among the four indicators (i.e. 25% of the budget per indicator). In secondary education, however, the neighbourhood indicator (student's place of residence) is allocated only 10% of the overall earmarked budget, with the other indicators weighing 30% each. The money value per student meeting a given indicator is calculated by dividing the overall budget for the indicator by the number of students meeting the indicator, resulting in four different money values. Table 2.1 provides further details.

Table 2.1. **Indicators of students' socio-economic status applied in the calculation of school operating grants**

Student characteristic	Indicator	Source of information	Money value per student (2013/14) in EUR	
			Elementary education	Secondary education
Cultural background	Educational attainment of the mother	Provided by parents	122.753547	125.540353
Financial capacity	Entitlement for a study grant	Flemish study grant administration	120.833022	114.666674
Linguistic and cultural capital	Language spoken at home other than Dutch	Provided by parents	146.689638	276.471822
Social capital	Student's place of residence	Flemish household administration	99.780364	40.793134

Sources: Flemish Ministry of Education and Training (2015), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools, Country Background Report of the Flemish Community of Belgium*, *www.oecd.org/edu/school/schoolresourcesreview.htm*; Examples of budget letters sent to Flemish schools.

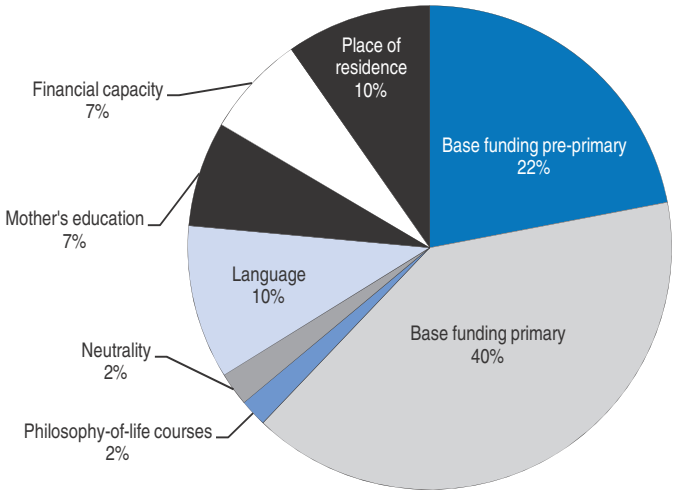
In calculating the size of the socio-economic component of the operating grant for each school, the number of students meeting each disadvantage indicator (e.g. those whose mothers have limited education) is multiplied by the number of Euros allocated per student for that characteristic, and the products are then added up. Annex 2.A2 provides an extract and translation of an official letter sent by AgODI to an elementary school in Brussels, which can help illustrate the approach used to calculating school operating grants and staffing hours for an individual primary school.

While the operating grant makes provision for "objective differences between schools" (such as meeting the neutrality requirement) and student characteristics (as reflected in the weights for disadvantage), the largest part (about 80%) of the operating budget is allocated on the basis of school characteristics, such as educational level, type of establishment and curriculum.

Within a given elementary school, the basic coefficient of *per student funding* is the same for both pre-school and primary school students.[3] However, the children in pre-school classes have a different *point value* to the children in primary classes. The point value of a child in pre-school is 5.3088, while the point value of a child in primary school is 8. In the sample Community school in Brussels, where the money value per point is set at EUR 82.566575, a pre-primary student generates EUR 438.329433 (EUR 5.3088 x 82.566575) whereas a primary student generates EUR 60.5326 (8 x EUR 82.566575). This reflects the expectation that the minimum fixed costs of operating pre-primary classes as compared to primary classes are about one-third lower (i.e. 5.3088/8) (Annex 2.A2). The difference in funding for operating expenses in primary and pre-primary education is based on the historical assumption that not all children will attend pre-primary education on a full-time basis.

Figure 2.5 illustrates the different components of the operating grant for 2013/14 in the sample elementary school presented in Annex 2.A2. It shows the different components that make up the grant, including the base allocation for pre-school and primary education, the adjustments for intake, and the contributions which reflect the legal requirements of philosophy-of-life courses and neutrality of provision. The sample school has 179 students (81 in pre-primary and 98 in primary education). It has a very high proportion of students meeting the indicators of disadvantage: of the 179 students, 166 speak a language other than Dutch at home; 117 have mothers with low educational attainment; 120 are entitled to a study grant and 175 students live in disadvantaged neighbourhoods.

Figure 2.5. **Operational budget components, sample Community school (elementary level), Brussels**



Source: Example of a budget letter sent to a sample Community school (elementary level) in Brussels by AgODI. For details, see Annex 2.A2.

In secondary education, the basic coefficient of per student operational funding further depends on the educational programme (ASO, TSO, KSO or BSO). In addition, within each programme students have a different point value depending on the courses in which they are enrolled. In ASO, the point value assigned to each student lies between 16 and 18 depending on the courses chosen by the student (a point value of 16 being most frequent). In TSO and BSO, the point value per child varies between 16 and 22 (a point value of 22 being most frequent). In 2013/14, the money value per point was set at EUR 49.774932 in ASO and at EUR 50.686142 in TSO and BSO.

Staffing

As noted above, staffing accounts for the vast majority of the financial resources going to schools. How staffing is allocated differs between elementary and secondary education. This section will address each level of education in turn. Staffing also differs in the case of special education, where calculations are based on type of programme (for more information, see Chapter 3).

Box 2.1. **Flemish evaluations of the 2008 approach to calculating school operating grants**

In summer 2015, just before finalisation of this report, two studies were published regarding the school operating grants for Flemish primary and secondary schools: i) the Belgian Court of Audit conducted an audit of the 2008 reform on the operating budget of school education, and ii) a consortium of researchers commissioned by the Flemish Minister of Education prepared an analysis and evaluation of the distribution and use of school operating grants. This box summarises the main findings of these studies.

Belgian Court of Audit (2015): Operating Grants for Primary and Secondary Schools

The Court's 2014 audit of operating budgets for primary and secondary schools relied on a direct analysis of school accounts and addressed three main points: i) allocation, ii) supervision and iii) use of budgets and objectives.

Regarding the allocation of operating budgets, the Court of Audit found that the calculation method for operating grants was applied correctly and that the risk of errors was fairly low due to a high degree of computerisation. However, the Court highlighted that the operating grants were set by means of a complicated calculation method that lacked transparency as not all parameters were made public. Although financing is relatively stable, student and school characteristics could cause average operating budgets per student to differ widely between schools.

Regarding the supervision of schools' use of operating budgets, the Court of Audit found that school reports on their financial activities varied and that schools' accounts often lacked cost details. It criticised that supervision of schools did not comprise a risk assessment procedure and that there were few agreements between central education inspection and the Agency for Educational Services (AgODI) for the purpose of school system related inspections.

Regarding the use of budgets and objectives, the Court's audit found large differences in the financial situation of schools depending on their ability to raise parental contributions, especially in secondary education. It criticised that the Flemish authorities did not have the means to acquire a global view on the use of operating grants and recommended that the supervision in this area should be enhanced. Regarding the SES-based part of operating grants, the Court of Audit found that there was little difference between the expenditure patterns of schools with high and low numbers of disadvantaged students. The main difference was the use of extra funding for measures against poverty. Schools used operating budgets to a limited extent to recruit additional teachers. The Court also found that the introduction of SES weights in the funding formula for operating budgets did not have any effect on favouring a better social mix of students in schools; quite the contrary, polarisation of students along socio-economic lines had increased since 2008. The audit recommended reconsidering the weight of student characteristics in the operating budgets, considering a more selective allocation of funding for equal opportunities and/or enlarging staffing requirements.*

Groenez et al. (2015): Analysis of Financing Mechanisms for Operating Grants

This study commissioned by the Flemish government relied on a mix of qualitative interviews in 20 schools, a survey of school principals and a survey of municipalities. It addressed i) the distribution of operating grants to schools by their school boards, and ii) the use and management of operating grants by schools.

Box 2.1. **Flemish evaluations of the 2008 approach to calculating school operating grants** *(cont.)*

Overall, the study found large variations in the financial situations of schools, largely because of the differences in additional resources that schools and school boards were able to generate. The study also highlighted that schools with certain characteristics were typically in more difficult financial situations; this included schools belonging to a school board responsible for only one school, schools with declining student numbers, rural schools and schools with a high level of unpaid parental fees. The study found that school boards can play an important buffering role for schools in such situations by helping schools avoid the accumulation of large or permanent deficits.

Regarding the distribution of school operating grants from school boards to schools, the study pointed out that school boards pursued a range of different distribution policies and did not always redistribute operating grants to their schools according to the same weightings as determined by the Flemish government. This was partly related to the size of school boards, with the larger school boards (comprising a higher number of schools) more typically establishing their own redistribution policies. In such cases, school boards established their own weightings and did not redistribute funding according to the per student weightings set by the government. Schools with a high proportion of low-SES students more often indicated that this was the case in their school board.

Regarding the use and management of operating budgets by schools, the study highlighted that schools and school boards enjoyed a high degree of autonomy with respect to the use of additional funding based on SES weights, as the Flemish government had not provided explicit directives for the use of such funding. It concluded that it was logical for schools with a more difficult financial starting situation to draw on these funds to address their most basic needs such as urgent repair and heating costs and/or to fill gaps left by unpaid parent fees. The survey of school principals indicated that schools with more disadvantaged student populations also needed to cover more specific expenditures to address the needs of disadvantaged students, such as specific teaching materials, in-service training or community school activities. Hence, the additional funding was found as providing the necessary material conditions for teachers to do a good job. Finally, the study reports that the additional SES-based funding was seen very positively by school principals in the sample, with over 90% indicating that they considered it a good policy.

* The Flemish Minister of Education gave a provisional reply to the recommendations of the Court of Audit (available at: http://docs.vlaamsparlement.be/docs/stukken/2014-2015/g37f-1.pdf) and announced that she would revisit the funding system on the basis of the two studies summarised in Box 2.1 and the findings of the OECD School Resources Review.

Sources: Belgian Court of Audit (2015), *Werkingsbudgetten voor het Gewoon Basisen Secundair Onderwijs Toekenning en Aanwending (Operating Grants for Mainstream Elementary and Secondary Education, Allocation and Utilisation)*, Verslag van het Rekenhof aan het Vlaams Parlement, Brussels; Groenez S. et al. (2015), *Analyse van het nieuwe financieringsmechanisme voor de werkingsmiddelen van scholen, Evaluatie van het Financieringsdecreet van 2008: Eindrapport (Analysis of the New Financing Mechanism for School Operating Grants, Evaluation of the 2008 Decree on School Funding: Final Report)*, *www.ond.vlaanderen.be/obpwo/rapporten/Analyse_nieuwe_financieringsmechanisme_werkingsmiddelen_scholen_DEFINITIEF_RAPPORT_HIVA.pdf*.

For both elementary and secondary education, there is a principle of free utilisation of staffing hours. This means that the schools, in consultation with school boards, are free to decide on organisational aspects such as class size, the distribution between teaching hours and other working hours for teachers and the distribution of hours between schools belonging to the same board. There are only a few restrictions to the principle of free utilisation, for example no more than 3% of the teacher hours can be used for special

pedagogical tasks (i.e. pedagogical activities other than regular teaching supporting individual students or teachers in the school) unless this is negotiated through a local negotiation committee and a protocol is signed.

Calculation of staffing hours for elementary education

Staffing is delivered to Flemish elementary schools through direct allocation of teaching hours from government to school board and also indirectly through allocations of staffing points to school associations (school associations are voluntary partnerships of schools in the same geographical area; for more information see Chapter 1).

The staffing allocation system currently in place for elementary education was introduced in 2012. The aims of the 2012 reforms to the allocation system were to equalise pre-primary and primary schooling and to reflect student characteristics in resource allocation. As part of this new system, staffing levels were raised by 8.8% in pre-primary education and by 1.7% in primary education. There were other changes made at the same time which relate to teaching load and duties. Separate lines of staff allocation were integrated into a global package. The allocation of staffing hours as a global package is consistent with the emphasis on the freedom of schools to vary their use of staff according to the priorities and philosophy set by their boards.

The formula to calculate teaching hours takes into account a set of school characteristics. First, the size of an elementary school makes a difference. The allocation scale of teaching hours is slightly degressive, i.e. it declines gradually with school size (Chapter 4). Second, geographical location is also factored in. A student attending a school in Brussels is weighted at 1.11 instead of 1 for the purposes of the staffing formula, while in thinly-populated rural areas, a child is weighted at 1.05. Third, there is also a weighting to address distance between campuses of the same school. If this exceeds 1.5 km, the school receives more teaching hours, as the two campuses will be counted as separate entities and scales for calculating teacher hours are degressive for each entity. The basic package of teacher hours is calculated based on the weighted number of students.

Student characteristics also play a role in the allocation of staff resources in elementary education. In scaling teaching hours, three of the indicators of socio-economic status (SES) considered for the operating grant are also used: cultural background (mother's education), financial capacity (entitlement for a study grant) and linguistic and cultural capital (language spoken at home). However, unlike for the operating grant, the dimension of location (place of residence) is not included. In addition, a weighting of 1.5 is applied to students who, for a variety of reasons, do not live with their own families and/or lack the support that family integration normally provides. These children include those living in a Centre for Child and Family Support, children in foster homes, those judicially separated from their parents, children whose parents have no fixed residence, and homeless children.

The SES weights can produce a large human resource impact on an elementary school. For example, in our sample Community school in Brussels (Annex 2.A2), the weights increase the basic teaching hour allocation by 36% for both pre-primary and primary levels. This impact comes on top of the area adjustment for Brussels which lifts enrolments by 11% and raises the basic teaching hour allocation. As can be seen in the letter to the sample school (Annex 2.A2), the school receives only 97.16% of the overall teaching hours it generated based on the scales (more on this below).

In addition to the basic package of teaching hours, elementary schools are entitled to complementary teaching hours for a range of specifically defined purposes. While schools are guaranteed free utilisation of their basic package of teaching hours, complementary teaching hours should be used in line with the purpose they were assigned for. These purposes include the provision of philosophy-of-life or cultural awareness courses, the integration of non-native speakers and inclusive education for students with disabilities. In addition, schools can receive extra hours to support their work in specific situations such as the voluntary merging of schools or the provision of education at home for students who are ill.

It is the responsibility of school boards to recruit teachers to deliver teaching within the designated amount of teaching hours. School boards typically delegate this task to the principals of individual schools. While teachers are recruited at the school level, they receive their salaries directly from the central level through the Agency for Educational Services (AgODI) (see Chapter 4).

For each school, the function of school principal is financed in addition to the teaching hours, which are based on student coefficients. In small schools, the school principal will be responsible for both school leadership functions and a (reduced) teaching load, depending on school size. At the pre-primary level, additional working hours are allocated to schools for child care (in mainstream education) and for a broader range of support staff (in special education).

As explained in Chapter 1, envelopes of points for extra management and support staff are allocated to elementary school associations. These points are then distributed by the association to individual schools. The points can be used flexibly for the following functions: co-ordination of information and communication technologies (ICT), support for students with special educational needs (SEN), administrative support, and co-ordination tasks at the level of the association. The number of staffing points needed for a part-time or full-time assignment will depend on the qualification and positioning on the salary scale of the respective employee.

The resource outcome for the sample Brussels school is presented in Figure 2.6. This reports the allocation of teaching hours with the level of statistical precision found in the official advice to a school. The figure separately analyses hours by educational level. Also shown are the teaching hours allocated for philosophy-of-life classes (Islamic religion courses in this case) at the primary level and for child care at the pre-primary level. Not depicted are the points which schools generate for ICT co-ordination (9 points) and general administrative support (33 points) – these are allocated to the responsible school association in a global envelope of points.

Calculation of staffing hours for secondary education

The funding model for staffing for secondary schools is different from the model for elementary schools in a number of key aspects. Annex 2.A3 provides an extract and translation of an official letter sent by AgODI to a secondary school in Herentals, which can help illustrate the approach used to calculating staffing hours for an individual secondary school.

The formula that is used to allocate teaching hours to secondary schools adjusts for the programme of study and the size of each programme. In addition, the claim that a student makes on teaching resources depends not only on the main programme (ASO, TSO,

Figure 2.6. **Composition of staffing allocation in a sample Brussels elementary school (teaching hours)**

	Staffing hours pre-primary level	Staffing hours primary level
Financial capacity	7.0638971	8.8080692
Language	22.12816	27.95136
Mother's education	14.1563	17.6286
Child care	8	0
Philosophy-of-life course	0	12
Basic schedule	121	147

Source: Information provided by the Flemish Ministry of Education and Training. For details, see Annex 2.A2.

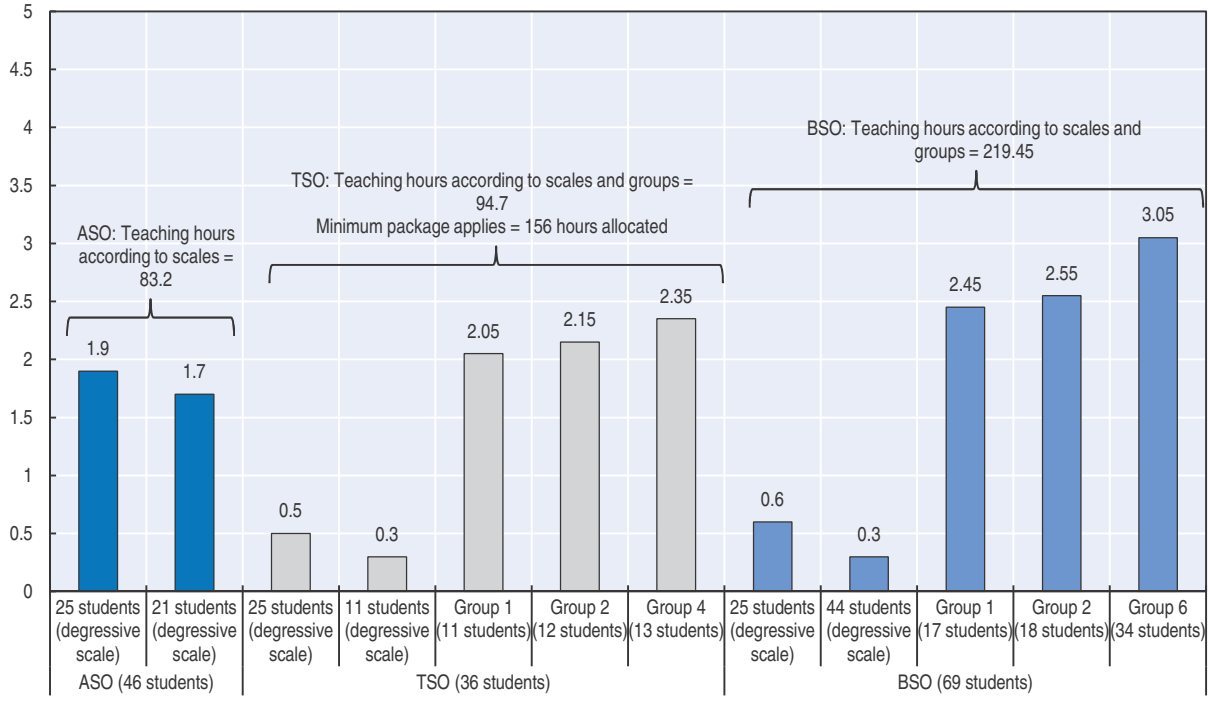
BSO, KSO) chosen by each student but also on the sub-programme (or course). A complex system of weights or student coefficients is used to make this adjustment. The students who exercise the highest claim on resources are those taking vocational courses.

The extent of this claim is measured by the size of the student coefficient. Figure 2.7 illustrates the differential weighting of students according to location in the curriculum for the sample upper secondary school presented in Annex 2.A3. In all programmes, the scales used to calculate teacher hours are degressive, i.e. programmes with a higher number of students receive a gradually smaller amount of teacher hours per student. For example, the academic (ASO) programme weighs students at 1.9 for the first 25 students and at 1.7 for the next group of students. The technical (TSO) and vocational (BSO) programmes weigh the first 25 students at 0.5 and 0.6 respectively, and the next group of students at 0.3. Within each programme, the same scales apply both in the second and the third stage of secondary education.

In the technical and vocational programmes, there is an additional weighting of students by "group". These groups refer to clusters of study areas. In the technical programme, for example, there are eight different groups.[4] In the sample school depicted in Figure 2.7, the technical programme weights students at between 2.05 and 2.35, depending on the group within this programme. The vocational programme weights students more highly again – between 2.45 and 3.05, depending on the group. Figure 2.7 shows a clear progression across programmes and groups, with students in Group 6 of BSO having a much higher weight than students in the general academic programme (i.e. 3.05 compared to between 1.7 and 1.9) (Annex 2.A3).

Finally, schools with small programmes can benefit from a so-called "minimum package" of teaching hours. The minimum package of teacher hours varies according to

Figure 2.7. **Programme and group weights in a sample secondary school (stage 2)**



Source: Example of a budget letter sent to a sample Community school (secondary level) in Herentals by AgODI. For details, see Annex 2.A3.

educational programme and stage of education. The sample school depicted in Figure 2.7 has a small number of students in the technical programme and therefore benefits from the minimum package for this programme. Based on student numbers and groups, the TSO programme would have generated 94.7 teacher hours. However, to ensure the minimum teacher resources necessary for the operation of this programme, the school in fact receives a minimum package of 156 teacher hours.

Similar to elementary schools, secondary schools do not receive the full amount of hours that they generate. A so-called "utilisation percentage" is applied, based on which schools receive 98% of the hours for philosophy-of-life courses, 96.57% of the hours based on student coefficients and 98.57% of the minimum package. As explained by representatives of the Flemish Ministry for Education and Training, this utilisation percentage was introduced in the 1990s together with the introduction of programme and group weights, as the education budget at the time was insufficient to finance the total amount of generated teaching hours.

In secondary education, there is no adjustment in the formula allocation of teaching hours for the socio-economic characteristics of students. Instead, secondary schools are eligible to receive additional teacher hours for socio-economic disadvantage through an older policy for equal educational opportunities (*gelijkeonderwijskansenbeleid*, GOK), on top of the formula allocation of teaching hours. For more information about the GOK policy, see Chapter 1.

To determine eligibility for supplementary teaching hours in secondary education, five indicators are used: i) the parent is an itinerant worker, ii) the mother has not completed secondary school, iii) the child does not live with his or her parents, iv) the family lives on

community support income, and v) at home, the child speaks a language other than Dutch (Lambrechts and Geurts, 2008). A school is eligible for additional GOK hours if a set percentage of its students meet at least one of the relevant indicators. The threshold is set at 10% of students meeting at least one of the indicators in the case of the first stage of secondary education, and at 25% in the second or third stages.

The reason for this difference in thresholds is historical. When the policy of GOK funding was originally implemented in 2002, the main emphasis was on compensating socio-economic disadvantage in primary and lower secondary education, in order to moderate the impact of socio-economic differences in access to secondary education programmes in the second stage (ASO, TSO, KSO). Therefore, a lower threshold was set for schools to qualify, thus reaching more widely across the school system.

Initially, the provision of GOK hours in the second and third stages of secondary education had a different emphasis. The focus was on preventing early school leaving and addressing the needs of students who were relatively disadvantaged in educational terms. Up until 2008, a different set of indicators were used to determine eligibility for GOK hours at these stages of education, namely: i) the child has repeated two or more years of schooling. ii) the child is enrolled in the second or third stages of TSO or BSO and in the previous year achieved a B or C certificate[5] in another school. and iii) the child attended reception classes for newly-arrived children not speaking Dutch. A higher threshold was set, the effect of which was to reach fewer schools, but focussing resources on student location within programme, and characteristics which were predictors of drop-out, such as grade repetition. Since 2008, the five indicators listed above are used at all stages of secondary education. However, the different thresholds of 10% and 25% are still in place.

To calculate the number of GOK hours allocated to schools that have a sufficiently high concentration of disadvantaged students, there is a complicated system to compute an amount of points per student, depending on the indicators met by the student. The weighted points are then summed up and multiplied by a coefficient. In secondary education, GOK hours are allocated for three years and schools follow a defined cycle of policy and planning (year 1), evaluation (year 2), and inspection (year 3). Within this framework, a school has considerable flexibility as to how GOK hours are used.

As in elementary education (see above), the approach to the funding of management and administrative support staff in secondary education differs from the funding of teaching staff. While teaching hours are funded through student coefficients, the functions of principal or co-ordinator are treated as a fixed cost (for each standalone entity) and are automatically funded. For other management roles and for administrative support staff, an envelope of points is used. The calculation of points takes into account the number of management functions, the number of support functions, and function and task differentiation. Behind this, the number of students is taken into account, the number of practical courses, and other factors. It is clear that the aim is to reflect all costs in detail and to make these accessible to costing at a central level before allocating a points package to schools for decisions on how support is actually used. The intention behind this 2009 innovation was to create more flexibility in how schools used funding support for management and administration functions. Instead of earmarking lines of funding for specific roles, the global package allows schools to vary their use of the allocation.

It is notable that, as in elementary education, the points envelope is assigned to the school association where this exists. Only very few schools do not form part of a school

association and these schools receive their point package directly. The school association can withhold up to 10% of the points contained in the envelope, or more if there is agreement from the negotiation committee of the association. This withheld component helps meet the costs of the association and its activities. These include using the points to assign temporary positions, e.g. releasing teaching staff or engaging additional staff through external recruitment. This represents a pooling of resources to deliver management and administrative support to the schools that form part of the association.

Funding for infrastructure

Investment in buildings and equipment comprises the third main area of education funding in the Flemish Community. As noted earlier, funding for infrastructure allocated to primary and secondary schools represented less than 5% of overall school budgets in primary and secondary education. Access to capital funding is organised through two public agencies:

- The GO! Education of the Flemish Community finances the creation or improvement of buildings in the Flemish Community schools network as public assets.
- The Agency for Educational Infrastructure (AGIOn) finances building works in grant-aided public schools (municipal and provincial) as well as in grant-aided private schools. Grant-aided private schools make up the largest sector of schooling in the Flemish Community. AGIOn meets 70% of their capital requirements in elementary education and 60% in secondary education. The unsubsidised balance can be met by a state-guaranteed loan. The asset remains privately owned for the grant-aided private schools. For the grant-aided public schools, the asset remains owned by the local authorities (municipalities and provinces).

More information on funding for school infrastructure and a discussion of related strengths and challenges is included in Chapter 3 as part of the analysis of the provision of school places.

Strengths

A critical perspective on the machinery of resource allocation in the Flemish school system aims to identify any features which have a potentially negative impact on the services that schools provide or on the capacity of different school populations to respond to the demands of schooling. But questionable features should be seen within the context of the strengths in educational vision and system design which describe Flemish schooling. It is important to highlight these strengths, at least in broad terms, before turning to the challenges that need to be addressed to make the machinery of funding work as well as possible.

There is a sustained high level of investment in schooling

The Flemish Community of Belgium supports a large and complex school system which performs at a very high standard internationally. Spending has been maintained against the downward trend in other European countries following the global financial crisis.[6] Over the past few years, changes to the system for distributing operating grants and staffing have led to substantial increases in the overall budget for schooling. The 2008 Parliamentary Act on the Financing of Education, which introduced equal funding for schools from all networks, relied on a structural increase of the total operational budget for

elementary education (by EUR 85.2 million) and secondary education (by EUR 40 million). The 2012 staffing allocation model, which ensured equal staffing for primary and pre-primary education and introduced an SES-based part in the school staff allocations, resulted in an additional investment of EUR 52.7 million in elementary education, corresponding to an 8.8% increase in staffing levels in pre-primary and a 1.7% increase in primary education (Flemish Ministry of Education and Training, 2015).

The Flemish Community's high investment in schooling is also reflected in the favourable conditions for teaching across schools. Financial and human resource inputs – reflected in indicators such as teacher-student ratios and expenditure per student – are more favourable than on average in the OECD and the European Union (more on this in Chapter 3).

The Flemish approach to school funding supports freedom of choice and school autonomy

The Flemish Community has made freedom of choice central to its philosophy of schooling and to the institutional arrangements which express this philosophy. That parents are largely free to choose schools removes a potentially major constraint on the engagement of parents in their children's education, represented in other systems by school zones and rules. As emphasised by respondents during the OECD visit in November 2014, parents' freedom of choice is conceived by most Flemish education stakeholders as an educational principle ensuring that the values and educational practices of home and school are consonant, rather than a principle of market or quasi-market economics (more on this in Chapter 3).

Parental choice is supported by the school funding system and in particular the commitment of the Flemish Community to free education. Regardless of the choice of school, parents do not have to pay tuition fees. There is, at least in principle, no financial impediment to parents' choice of school, as almost all schools in the Flemish Community (over 99%) are free. In addition, since 2008, there has existed a uniform approach to recurrent funding of schools in all networks. This is a very different situation to that found in other jurisdictions, such as Australia, where subsidised Catholic schools charge tuition fees, or France, where fees can be levied to meet building costs (Australian Government, 2011; Ministère de l'Education Nationale, 2012).

The second animating principle of Flemish schooling is autonomy. The Flemish approach to school funding is in line with a strong focus on school autonomy. Most resources going to schools are not earmarked, which gives schools flexibility to use resources to fit their specific needs. Schools receive itemised letters from the Ministry of Education and Training, making transparent the operational funding and staffing hours each school has generated. School boards have full autonomy in most areas of resource policy including setting up budgeting and accounting systems, communicating with relevant stakeholders about resource use, recruiting and dismissing school staff,[7] organising school leadership, making decisions about the use of teacher hours, maintaining the school infrastructure and establishing relationships with contractors and vendors (Flemish Ministry of Education and Training, 2015). Autonomy in funding decisions provides the conditions for schools to use resources in line with local needs and priorities.

In principle, the Flemish school system thus invites parents to engage themselves fully in the education of their children – by enabling them to extend their values and efforts into the school of their choice – and encourages schools to energetically pursue a

philosophy or project, confident of parental support and relatively free of bureaucratic direction. Choice and autonomy invigorate Flemish schools. But in a society in which not all parents have equal means – material and cultural – it is important to establish safeguards to ensure that choice and autonomy do not aggravate rather than alleviate inequalities.

Choice and autonomy are balanced with a focus on equity in the funding model

As described above, the Flemish school financing system is designed to support equal access to educational opportunities for all students and compensate for the differences in family background.

To help schools meet the needs of students from diverse backgrounds, the operating grant is weighted for socio-economic status. This is intended to check the influences of key differentiating variables – mother's educational level, foreign language spoken at home, the family's financial capacity, and the students' neighbourhood characteristics. The relevance of these factors to differences in schools' operating budgets lies in the reduced access to opportunity which they create. Even though the contributions of parents to schooling are capped (in elementary school) and represent a modest amount, they are not always within the capacity of disadvantaged families to meet. During the OECD visit, it was reported by respondents that adjustment of operating funds in favour of schools enrolling students from disadvantaged backgrounds helped in part to restore access to extra-mural activities (such as excursions) and also enabled schools to purchase books, material and equipment that disadvantaged families were not able to buy or rent themselves.

Schools serving disadvantaged communities, it was observed, also faced difficulties in improving the physical condition of buildings and thus enhancing the learning environment. An investigation by the Court of Audit found, indeed, that many schools drew on their operating grants to improve the physical amenity of school buildings and that about half the schools in the Court's sample had also cut extra-mural programmes (Belgian Court of Audit, 2011). It may be that schools set different priorities, depending on the challenges that they face and the degree of flexibility they have within their budgets. Where a school recruits largely from disadvantaged families, it will typically have very little flexibility available from parental contributions. This can be expected to put pressure on how the operating grant is used.

The weighted funding based on socio-economic indicators thus helps schools under financial pressure to have an additional budget to meet urgent needs of its student population, without providing explicit directives on the intended use of this budget (Groenez et al., 2015). The design of the indicators to generate additional operating grant resources further recognises that both the socio-economic characteristics of a school's intake and the locational characteristics of students' residence influence educational opportunity. Although these two dimensions are related, they are not the same, as the pattern of free choice of school in the Flemish Community facilitates mobility and educational choice, leading to selectivity of intakes, including in locations that are disadvantaged. The weightings in the operating formula acknowledge these two distinct barriers on the ability of children and young people to take advantage of the opportunity for learning and for socio-economic integration.

Student socio-economic characteristics are also used in the allocation of teaching hours to elementary schools, and secondary schools receive a top-up of teaching hours based on

such characteristics. Differential weighting recognises the adverse impact on student learning of a limited level of financial capacity, low parental education, and speaking a foreign language at home. The SES weights enable remedial classes to be run, classes to be split, and teachers to be released for a range of pedagogical and support activities. In these ways the Flemish authorities seek to balance choice and autonomy with equity.

The funding system provides some incentives for school collaboration and pooling of resources

As explained above, operational resources are allocated to school boards (i.e. the school groups in Community education, the local level authorities in subsidised public education and private foundations in subsidised private education). The financial autonomy of individual schools varies across school boards but, according to stakeholders interviewed by the OECD review team, school leaders typically plan their budgets in collaboration with the school boards. Some boards of the schools visited by the review team took an approach where they provided support to schools in the more technical aspects of budgeting and accounting, allowing school leaders to focus attention to more strategic tasks. Where school boards are responsible for several schools, they can acquire operational goods and services for a number of schools in order to achieve economies of scale. The school boards that are in charge of multiple schools may also redistribute resources among their schools according to needs and organise key services for their schools. However, it should be noted that some school boards are responsible for only one school or very few schools, which reduces their opportunities for sharing resources and achieving scale economies.

Over the last decade, the policy supporting school associations (Chapter 1) has aimed to further increase collaboration between schools, including beyond the borders of individual school boards. As described above, resources for administrative and management staff are typically allocated to school associations. This approach can be seen as playing a broader role than simply meeting basic staffing needs. It enables schools to pool resources and access services that they cannot provide from their own resources alone. Further it allows associations to perform valuable roles, such as the dissemination of good practice in inclusion of students with special needs. Another valuable role is to enable schools to co-ordinate programmes and avoid competition within associated schools. Given the large number of course options with fewer than five students (as reported by the Belgian Court of Audit, 2010), this represents a significant step towards creating more viable class and group sizes in secondary schools. This is especially important in the context of the Flemish school system which is highly devolved and is made up of comparatively small schools in a largely urbanised community (Chapter 3).

Challenges

Funding can be viewed in terms of the architecture of the school system – elementary and secondary schools, the different networks, the school boards and associations, and the logic behind these features – but also in terms of the outcomes of schooling. The high performance of Flemish students on PISA is one indicator. But so, too, is the large gap between students from different socio-economic backgrounds (Chapter 1).[8] Socio-economic differences in educational outcomes point to an interaction between family and school influences. The complex machinery of the school budget in the Flemish Community – which translates a big portfolio commitment into resources – is meant to sever the

connection between who a child is and how well he or she achieves. This is the principle of equity. However, what is known of student outcomes in the Flemish Community suggests that this connection remains strong (see Chapter 1), despite the complexity of the resource allocation machinery and despite the high level of budget commitment on the part of government. This section discusses a range of challenges related to the current funding model.

A lack of information on student learning outcomes makes it difficult to evaluate the impact of school funding

The OECD review team formed the impression that a critical scrutiny of the suitability, effectiveness and efficiency of the budget model is hampered by a systemic lack of knowledge of how well Flemish schools work and for whom. At a broad level (the Flemish Community as a whole), valuable information is gathered through the National Assessment Programme (see Chapter 1) as well through international surveys such as PISA and TIMMS. Both national and international assessments have identified performance differences within the school system at the level of the Flemish Community. But the information available to schools is limited. Schools can use "parallel" versions of the National Assessment Programme instruments to test their students. However, it is viewed as contradicting freedom of education to impose standardised testing across the Flemish Community. On the other hand the majority of schools do use standardised tests developed by their networks.

The basic question is whether there is enough knowledge available to guide policy at a school and Community level regarding opportunities and outcomes for different groups of Flemish children. There are no national examinations. These are viewed as offering no real advantage to students and their families and as potentially impairing the performance of schools by focussing efforts too narrowly on examination results. It is thanks to international assessments and to academic studies that researchers have been able to test the equity credentials of Flemish schooling. The picture that emerges is that equity is a project in action, not yet an accomplished result. There are both advantages and risks to introducing national assessments and examinations, which need to be carefully considered (for a detailed discussion, see OECD, 2013b). But there is a clear challenge facing the Flemish school system–the need for a strategy to assess the progress of different groups over the course of their schooling and into the workforce, technical training or tertiary education.

The longitudinal analysis of study careers in secondary education (*Loopbanen in het Secundair Onderwijs,* LiSO) and study of school-to-work transitions (*Studie van de Overgang van Onderwijs naar Arbeidsmarkt,* SONAR) conducted by the Centre for Education and School Careers (*Steunpunt voor Studie- en Schoolloopbanen,* SSL) may go a long way towards meeting this need. For without comprehensive and accurate data on what happens to students during both elementary and secondary education, it is difficult to assess how well the machinery of the budget works, how consistent its various components are, how well targeted supplementary funding is, and whether, in the end, the budget model delivers value for money (for more information on these projects, see OECD, 2010). The Flemish Ministry of Education and Training has also set up its own Early School Leaving Monitor which is aimed at tracking pupils who leave school at age 18 or later without obtaining the upper secondary school qualification. The value of longitudinal studies for investigating the impact of differences in resource levels and utilisation will depend on whether the

studies contain relevant design specifications and whether the structure of samples enables resource-related issues to be investigated. An innovative approach to measuring outcomes over the longer term is the participation of Ghent in the International Study of City Youth (ISCY). This tracking programme involves international comparisons, controlling for the background and achievement level of young people as they complete upper secondary education (Demanet et al., 2014; see also *http://iscy.org/cities/ghent/*).

There is no empirical picture of resource outputs

If the first challenge is to measure student outcomes, the second is to measure expenditure outputs. The budget is designed in terms of a set of entitlements as represented by student coefficients, whether SES, course-related, or disability-related. These determine the structure of inputs into schooling. However at present, resource outputs are only described at a very general level and we do not know how much individual schools consume in terms of per student resources (as distinct from their entitlement). It is possible that some schools have higher resource profiles than other comparable schools, for example if they raise more funds from parents or employ more costly teachers.

The student or course coefficients determine the formal entitlement of students to teaching resources, with students in BSO programmes generating the highest amount of teacher hours. However, from this it does not necessarily follow that students undertaking vocational courses are the most highly resourced in practice, that is, from the angle of real allocation as reflected in per student expenditure. Some quite small classes operate in the general academic programme – as well as in technical and vocational programmes – and the master's level qualification required of teachers in upper secondary education drives up the per student cost as do the small numbers following some courses. Thus in upper secondary education a student in the general education programme has a comparatively low coefficient, but may be taking subjects with only a small group of fellow students and is certain to be taught by a comparatively well-paid teacher (having a master's level qualification).

The resource output is the real cost of educating a student. This is distinct from the entitlement or claim on resources associated with grade, programme and group. The difference between entitlement and output lies in the policies of school boards and school leaders. They are free to decide what courses are taught at what levels and by whom. The student coefficients send a signal regarding the broad pattern of resource outputs that government is seeking (through deliberation with stakeholders). But boards can ignore these signals and staff courses in the way they think best. In other words, there is no guarantee that a given student will in fact benefit from the additional resources he or she generates based on socio-economic background and course choice.

This points to a larger challenge regarding a lack of transparency in the Flemish model of school finance. Not unlike funding regimes elsewhere, it represents the accumulated wisdom of experience over many years, with multiple adjustments as circumstances change or as the policy emphasis shifts. New rules are introduced to replace old ones, but the old ones linger on. New systems make their appearance, but run in parallel with older systems, as for example the different approaches to SES funding of teaching hours in elementary and secondary education. The operating grant is for running expenses, but in practice is also applied to infrastructure. Adjustments to the staffing model through differential weighting of students do not appear to be evaluated for impact or fitness of purpose, even though by their very nature they stimulate change and adaptation and need to be monitored. For about 15 years, schools have received only about 97% of allocated

staffing hours; this reduction was initially introduced as a linear saving measure and cannot easily be adjusted due to budgetary constraints. Schools need continuity and predictability so there is a reluctance to prune back the thicket of policy with its many branches and offshoots. Yet, the downside of this approach is an ever-increasing opacity of the funding approach.

At a school level, too, there is a lack of fiscal transparency. Schools, as autonomous entities, receive a budget but the real cost of running programmes and services is not reported. Schools do not construct their own budgets, even though they are autonomous. Income from non-public sources is not reflected in the Ministry budget, even if it might be exhumed from audit reports for the Ministry of Finance where the emphasis is on accounting compliance rather than educational use and value. It could be argued that complexity is a not unreasonable price to pay for a high-performing system. But Flemish schools are not uniformly high performing, and the point of having a funding model is to reach a consistently high standard for the whole of the Community. If it is difficult to evaluate the model, it cannot be easier to operate it.

The impact and effectiveness of resources for equal opportunities are not sufficiently monitored

Elementary schools receive higher allocations of teaching hours based on SES profile, and secondary schools receive additional GOK hours. The additional hours should provide schools with more staffing flexibility so that more varied approaches and more individual attention are possible. But an empirical view of the resource margin and of resource utilisation is necessary to understand the impact of such factors as school size and community setting and also to assess the issue of whether resources could be more heavily concentrated in fewer schools.

There is indeed a risk of dispersing SES funding too thinly either by sharing it amongst too many schools or by offering all eligible schools the same level of support, regardless of *relative need*. An important question relates to the density thresholds themselves – 10% for the first stage of secondary education and 25% for the second and third stages. The rationale for differential treatment of stages in secondary education was originally based on the argument that i) SES disadvantage is best tackled during primary and lower secondary education and ii) in second and third grade secondary education, it is better to tackle *educational* disadvantage (such as a history of grade repeating and relegation to the vocational programme).

Even after the indicators for the second and third stage were changed (thereby extending the focus on SES disadvantage to all stages of secondary education), the different thresholds were maintained. However, it is not clear why a secondary school must have at least one in four "at risk" students in the second and third stage before it can access GOK hours. This may be desirable from the point of view of concentrating resources in schools of high measured disadvantage and thus seeking to have maximum impact. But there needs to be greater transparency with respect to how many schools qualify, how their access is structured (as they do not receive the same levels of per student support), and how many additional hours they do receive.

While inspection has a valuable role to play in reviewing whether schools are working towards attainment targets, the cost and effectiveness of GOK loadings or programmes also need to be kept under review. The number of schools receiving GOK hours is not

reported in global statistics on Flemish education. Nor is the overall amount of hours and the associated salary cost.

Research that has been done at the level of the Flemish Community points to only modest gains from a rather slender supplement to teaching resources (Ooghe, 2013; Hindriks and Lamy, 2013). This may be due to a too-thin dispersal of hours across a great many schools, with the average marginal gain in resources being too small to affect the level of change required in a school. Analysing the 2002-05 cycle, Ooghe (2013:4) found that the increment to resources typically fell within the range of 0.5 to 1.0 additional teacher (full-time equivalent) per eligible school. Although this study focuses on the period prior to the 2008 introduction of SES-weighted operating grants the fundamental questions it raises are still relevant: is the generated amount of additional resources sufficient to enable schools to make a difference to the achievement levels of their students, their engagement in schoolwork, and their progression both within school and beyond? This depends on how schools deploy the additional resources, but the margin of staffing flexibility created by the GOK hours appears to be limited and heightens concerns regarding thresholds and dispersal of resources.

There are other school systems in which these concerns have been raised, specifically with respect to funding for equity. In the state of Victoria in Australia, for example, a systematic review of funding conducted in 2004 found that the equity budget was thinly dispersed across almost half of all public schools (University of Melbourne, 2004). Similarly, an investigation of resource allocation in Western Australian public schools found that half of all such schools received equity funding. This wide dispersal produced only a small increment to resource levels, including in the most severely disadvantaged schools (Teese et al., 2009).

Some schools have little financial flexibility

During the OECD review visit to the Flemish Community of Belgium, schools drew attention to differences in access to activities and services and to educational facilities and materials, including ICT devices. Language and cultural differences contribute to poorer access on the part of many immigrant children. As we have previously observed, while costs in elementary school are capped, there remain issues of parent co-operation, especially in a context of socio-economic disadvantage. Schools step in to make up for shortfalls in parental contributions for the purchase of materials and books, and to help meet the costs of excursions and other extra-mural activities considered essential to the educational project.

There is no legal cap on charges in secondary school, where costs tends to be higher, as with calculators, longer excursions and other expenditures. While government has sought to address these costs through a combination of supplementary funding to schools and transfer payments for parents (e.g. entitlement to a study grant), teaching staff in some of the schools visited by the OECD review team pointed to continuing stress in schools serving the most disadvantaged neighbourhoods and families, and a continuing struggle to answer need. The operating grant is basically the only source of financial flexibility available to schools once parental and community contributions are exhausted. As not all elementary schools receive full-time administrative support, there may be very little flexibility at all in the case of small schools in disadvantaged areas. Further pressure is experienced by schools in relation to maintaining or improving buildings in disrepair (see above).

The key issue here is the flexibility of schools. The Flemish Community places great emphasis on the autonomy of its schools. But freedom to develop and operate policy is relative to the resources available for its exercise. As pressure on schools in challenging socio-economic contexts accumulates, the categories of school finance also come under pressure. The boundaries that government seeks to maintain between different budget lines become blurred. On the one hand, government seeks to maintain integrity of purpose, for example the operating grant is destined officially only for running expenses. On the other hand, schools seek to address the needs of all their students, using the totality of the resources available to them and using their autonomy as far as it reaches. But if there is no flexibility in funding arrangements at a school level, there is also limited autonomy. Schools can employ whomever they wish amongst qualified teachers and will never receive a bill. They cannot trade teaching hours for student services or for building repairs. They are free to spend large amounts in per student terms on small specialist classes, knowing that if they made savings by running larger classes or collaborating with neighbouring schools, they would not be able to use the savings to fund ancillary services or fix a leaking roof or re-wire a building or appoint a community-liaison worker.

The question of SES weighting of the operating grant is symptomatic of a bigger issue – the limitations in the access of schools to the totality of their resources. Weighting the operating grant by socio-economic characteristics recognises that some schools lack the flexibility needed to respond to the challenges they face. What is problematic is that the flexibility schools show in using the grant (e.g. to fund building repairs) is viewed as an infraction of purpose, while the real problem might be that schools in disadvantaged contexts have no other sources of funding, neither from parents nor from the funding authorities, and may not have a budget in the proper sense of the term.

Concerns about the distribution of funding across levels of education

Published summary statistics show that overall spending per student in the Flemish Community is significantly higher in secondary school than in elementary school. In 2013, per student expenditure in mainstream secondary education amounted to EUR 8 589 compared to EUR 5 030 in mainstream elementary education (Table 2.2).

Table 2.2. **Annual cost per student by level and type of education (EUR), 2011-13**

Level and type of education		Year		
		2011	2012	2013
Mainstream education	Elementary	4 707	4 858	5 030
	Secondary	8 244	8 474	8 589
Special education	Elementary	14 943	15 405	15 891
	Secondary	18 856	19 065	19 460

Source: Flemish Ministry of Education and Training (2015), *OECD Review of Policies to Improve the Effectiveness of Resource Use in Schools, Country Background Report of the Flemish Community of Belgium*, *www.oecd.org/edu/school/schoolresourcesreview.htm*, Annex Table 2.4.

The Flemish approach to funding teacher salaries is likely to be the main contributor to the large difference in expenditure across levels of education. The system of funding assigns schools a total number of teaching hours, but does not place a limit on the cost of these hours. School boards appoint staff and decide how hours are allocated, but they do not have to operate within a financial constraint or cap on costs. They operate within their

entitlement. In effect, school boards send the bill to the Ministry, which the Ministry pays because the bill is based on a pre-determined entitlement. A combination of factors is likely to contribute to high teacher salary costs in the second and third stages of secondary education: teachers in upper secondary education have a master's qualification and are paid more and classes are often smaller. However, there is a lack of transparency about the real level of funding for teachers at different levels of schooling and there needs to be a clear and persuasive rationale for the different levels of support that are provided.

These differences in spending across levels of education should be seen in the context of the relative impact of education spending by stage of schooling. Studies, such as by James Heckman (2008), have concluded that early intervention is more productive than late intervention. To compress socio-cultural differences in achievement requires structured programmes in early childhood care and education, extending upwards into primary school. An example of where this should be applied in the Flemish Community relates to the provision of language-support programmes. Respondents in the OECD review visit argued that these programmes were of too-short a duration and should be extended for up to six years to have a real impact on the language development of immigrant school children (see also Nusche, 2009).

The Flemish Community, like many school systems allocates resources in a traditional pattern in which students who progress through to the end of secondary education are treated from a funding angle as requiring higher outlays, while students who are struggling with lower secondary or elementary school work receive fewer resources. The risk of failure is higher in primary than in secondary school to judge from the percentage of students who report repeating a grade in primary school as compared to repeating in secondary school (Chapter 1). So there is a case to be made for seeking greater balance in funding across educational levels. A major reduction in under-achievement in primary school would help increase the flow of students into the A stream and later into general education and would likely reduce levels of dropout as well as unemployment on leaving school.

Differential resourcing of educational programmes in the secondary sector raise a range of concerns

The design of the secondary staffing model, which applies different weightings depending on educational programme and study area, raises a range of issues. These concern both the strength of the rationale for this policy and the efficiency, effectiveness and equity outcomes of differential funding for programme and group.

Turning to the rationale, differential funding of technical and vocational courses might be justified on the grounds that there is more specialisation in these programmes (due to their industry or occupational focus) and thus a thinner distribution of students. A higher allocation of teaching hours compensates for this. However, this assumes that delivering these more expensive courses also delivers relevant transition outcomes in the form of work-based training (apprenticeship), higher technical studies or jobs based on the industry or occupational focus of TSO or BSO courses. However, there are indications that a range of programmes that are currently proposed do not prepare students well for the labour market (Belgian Court of Audit, 2014). If the evidence of student transition does not support the conclusion that specialist course options secure good transition outcomes, differential funding needs to be re-examined.

There might also be a case for spending more on classes whose students are at risk of low achievement and drop-out. As Hirtt (Varin, 2006) has demonstrated, Flemish students in the highest band of socio-economic status have ten times the chance of being placed in the general (academic) programme of secondary education and have virtually no chance of being placed in the vocational programme. More teaching hours might be allocated to classes enrolling students at risk of drop-out, a higher concentration of which can be found in the BSO sector. But that would depend on the educational objectives of the streamed specialist classes that receive higher per student weightings. It is not clear that greater spending on these courses is intended to lift the general level of achievement, as distinct from offering specific forms of training (e.g. workshops with smaller student groups) to better access the labour market. The rationale for higher investment in these programmes and courses has not been made explicit.

Efficiency and effectiveness of high investment in a fragmented course offer

Specialisation in the form of multiple courses raises the unit costs of education and disperses the budget thinly over many different options. This is expensive, especially in the context of the comparatively small size of Flemish schools, declining student numbers in some areas, and competition between establishments. Were schools larger and fewer in number, or at any rate were they to collaborate on running specialist classes together (as does happen occasionally), this would make specialisation more economically viable and less expensive in per student terms. This would not necessarily improve the effectiveness of technical and vocational courses (impact on students). But larger, more mixed classes and more broadly designed courses could offer the possibility of improving cognitive as well as economic outcomes, and thus gaining in equity as well as efficiency.

Limitations of differential resourcing of programmes and courses as an equity strategy

The differential weighting of student numbers according to programme and group should be seen in the context of the absence of adjustments in the formula allocation of teaching hours for the SES of students. Unlike in elementary education, no loadings are applied for SES in the allocation of teaching hours in secondary school. The older system of GOK funding does deliver additional hours for schools meeting SES criteria, but this approach to equal opportunities is not integrated in mainstream funding.

Seeking to incorporate SES weights into the staffing formula would no doubt add still further to the complexity of the approach. But it might well be argued that the system of weights owes its current complexity to the lack of adjustment for the family characteristics of students: the weights for study programme can be interpreted as a compensation package for the relatively more disadvantaged students who predominate in the technical and especially the vocational programmes.

The challenge of student diversity in cognitive growth is handled in the Flemish Community by differentiating programmes of study so that students are only exposed to performance demands that they can manage. If all were placed in the same programme, the challenge of diversity would be intensified and would require a range of different interventions that targeted the socio-economic factors undermining achievement. This is what the SES weights in elementary school aim to do. By contrast, secondary education appears to address the challenges of diversity by orienting higher proportions of weaker students to technical and vocational programmes and thereby progressively lowering academic demand on these students. In this way, pressure is taken off the teachers and the

classes of general secondary education and transferred to the technical and vocational programmes where it is managed by different expectations and also by heavier resourcing.

It is thus possible to view the hierarchy of the Flemish secondary school curriculum as a way to deal with student diversity, based on lowering demands on performance for some students and supported by a greater formal entitlement to teaching resources. Seen in this light, the weightings for the SES of students applied to the undifferentiated curriculum of elementary school surrender their place to weightings for programmes and courses in the differentiated curriculum of secondary school. It is a measure of the success of this tradition that Flemish students are amongst the highest performers in Europe (including students from disadvantaged backgrounds), and it is a measure of the failure of this tradition that the performance difference between students from different socio-economic backgrounds is amongst the greatest in Europe. It should be noted, that past policies have aimed to raise cognitive demands in all programmes, by imposing more stringent educational objectives. As mentioned in Chapter 1, the Master Plan for Secondary Education aims to abolish the hierarchy between the different programmes.

Higher investment in TSO and BSO programmes may not benefit the targeted groups

While course loadings express a higher entitlement to resources on the part of students with weaker academic profiles on leaving primary school, this does not mean that they in fact enjoy a greater share of total teaching resources than students who entered the general programme, or that spending on them in per student terms is higher. Comparative statistics show that the Flemish Community is at the high end of spending per student in secondary education (Government of Flanders, 2013) but these estimates are aggregates for whole jurisdictions and do not provide insight into the variability of expenditure per student at a sub-regional or sub-group level, i.e. we do not know whether BSO students benefit from higher investment overall than TSO and ASO students.

In fact, any advantage in terms of entitlement (student coefficients) may be neutralised by curriculum policies and higher salaries (due to the requirement of higher qualifications) in general upper secondary education. As will be further discussed in Chapter 3, there is evidence that schools frequently shift teaching hours generated by students enrolled in specialised BSO classes towards the ASO and TSO programmes in order to sustain small courses with narrow levels of interest. This practice in turn results in larger class size in the BSO sector, as opposed to what the generated teaching hours would indicate (Belgian Court of Audit, 2010).

Moreover, the extra teaching hours that technical and vocational students do enjoy by way of entitlement may in some cases simply compensate for the costs of small class numbers rather than reversing educational disadvantage. In other words, the higher entitlement may translate into sitting in smaller classes, but not necessarily being extended cognitively. By age 15, a large achievement gap has opened up between students from different socio-economic backgrounds in the Flemish Community, and the machinery of early selection, transfers and grade repeating contribute to the creation of this gap. A commitment to reducing the gap would need to examine whether differential resourcing of courses succeeds or fails as an equity strategy.

Policy recommendations

If Flemish education is to be distinguished both by excellence *and* equity, the funding model should deliver a high level of support to weaker students and they, for their part, should be exposed to a high level of cognitive demand through the curriculum.

The philosophy of parental choice and school autonomy has been rewarded by internationally high standards of achievement, but the machinery of funding might be retarding the progress of many students. More investment per student is made in secondary education than in elementary school. As this fails to compress socio-economic differences in achievement, a system of early selection and streamed provision appears to reduce pressure on both students and teachers in secondary school. This is expensive to operate and complex in design. The objective appears to be to manage the consequences of low achievement rather than ending failure through early, sustained and carefully targeted interventions.

The Flemish approach supports the progress of strong students (educated together in the general programme), but it accommodates rather than challenges weaker students. The additional teaching hours which make up the course-based entitlement of low achievers should have been allocated earlier before selection and streaming. Fragmentation of the curriculum in secondary school adds to the costs of operating small, competing schools, and drives up the costs of accommodating diversity when the point is to reduce achievement gaps and spend money where it can have the greatest impact. The recommendations which follow are made with a view to both simplifying and refocussing the machinery of the school budget so that what Flemish schools do best, they do for all.

Recommendations are framed with a view to: i) making more effective use of school funding, ii) containing costs without adverse impact on quality of service or educational opportunity, and iii) achieving greater transparency in funding support and student outcomes. The recommendations aim to finance improvements in educational outcomes, not to withdraw resources from schools.

Develop a community-wide reporting framework for school funding

The Flemish school funding system would benefit from the development by the Flemish authorities of a Community-wide reporting framework bringing together financial indicators and student outcome indicators. The school funding system in the Flemish Community is complex and not fully transparent or readily understood. The high level of public investment in Flemish schools supports a high level of performance, but is also accompanied by large socio-economic differences in achievement. To maintain high standards and to narrow the equity gap are goals that require Community consensus regarding fiscal effort and social inclusiveness. To build this consensus would gain from periodic in-depth public reporting both of resource inputs and student outcomes.

For preparing this report, the OECD review team had the benefit of a Country Background Report, but this was specially prepared rather than having been produced regularly for consultation within the Flemish Community and for discussion with relevant partners. The review team could not locate any overarching legal document detailing the system of student coefficients and weights used to calculate operating grants and staffing hours for schools, as the regulations provide a scattered picture with several Parliamentary Acts and a large number of Circular Letters on the matter. For the purpose of this report, the OECD review team deduced the main funding principles of the Flemish school system

from example letters sent to individual schools. Given the important share of public resources devoted to schooling, it is important to make transparent the funding machinery – design principles, structure and expenditure outputs. It is equally important to understand the goals of the funding effort – the impacts that the publicly-funded education system is called on to make for the Flemish Community.

The form that a Flemish Community report on education might take is best considered by the Flemish authorities themselves. But contrasting examples of comprehensive reporting include in Germany *Bildung in Deutschland* (Lohmar and Eckhardt, 2012) and the more thematic and investigative *Das Bildungswesen in der Bundesrepublik Deutschland 2011-12* (Kultusminister Konferenz, 2013), and in France *Repères et Références Statistiques sur les enseignements, la formation et la recherche* (Ministère de l'Education Nationale, 2013). These are not proposed as models, but represent different approaches to systematic reporting on education inputs and outputs. While not proposing to specify either the form or the content of a Community-wide report, it may be useful to indicate some broad topics which together cover the fields of funding and outcomes. These are set out in Table 2.3.

Introduce a school-level reporting framework on resources

As described above, transparency at a Community-wide level can be advanced by developing a comprehensive framework of reporting of resources and outcomes. But transparency could also be enhanced at the level of schools, by introducing a school-level reporting framework which enables schools to examine the fiscal impact of their resource and curriculum decisions. For these are important decision-makers in a devolved system of schooling. The framework should be developed in consultation with schools, but the preparation of reports should be undertaken by the Ministry, using existing data and not imposing more paperwork on schools.

Table 2.3. **Example themes for a system-wide reporting framework on school funding and outcomes**

Financial indicators	Funding effort	Expenditure by educational level, per student, etc.
		International comparisons
	Funding machinery	Operating grant, salaries, infrastructure
		Principles and processes
	Funding for equity	Elementary and secondary education; operations and staffing; different approaches
		Secondary schools qualifying for GOK funding; impact on school resource level
		How schools use equity funding
		The impacts of equity funding
	Distribution	A socio-economic analysis of funding outcomes (spending per student by school) (including by programme in secondary education)
Student outcomes	Participation	Pre-school education and care
	Achievement	National Assessment Programme results by student group
		PISA results and trends
		TIMSS results and trends
	Progression	Grade repetition
		Access to different programmes
		Drop out
	Attainment	School completion
		Post-school transition
		Attainment goals

In particular, the costs of delivery of school programmes and the budget impact of resource and programme decisions should be made more transparent. This is in the context of the autonomy that Flemish schools enjoy and the limited accountability that balances this. To take some examples, secondary schools are free to decide on which courses they teach and how classes will be staffed. These autonomous decisions – which may, of course, be influenced by school associations – determine the teacher salary cost to the Ministry. Thus, a decision to run a class in Latin for five students represents an expensive commitment as does a class of five in a vocational course. The school is not required to take into consideration the fiscal impact of its decisions, as it is covered by the hours of teaching supplied by the funding formula (which is blind to *who* teaches and to *how many* students).

Rebalance the resource effort between educational levels

Given the current imbalance of spending between elementary and secondary education, the Flemish authorities should examine the advantages and disadvantages of shifting to more equal spending per student between elementary and secondary education.

Research from different countries has found a common international pattern of greater spending on secondary than on elementary school (Odden, 1999). Historically, this was based on higher teacher salaries and also smaller, specialist classes in higher grades of schooling. However, as participation in upper secondary education became general, the historical pattern persisted. This was despite larger classes and the convergence of teacher salaries in many jurisdictions (as the qualifications level of primary school teachers rose). As concern over the early emergence of achievement gaps in primary school has risen, an increasing number of jurisdictions have rebalanced their spending patterns, in some cases giving the same weight to primary and secondary schools, in some cases giving greater weight. The United States experience is summarised in Lamb and Teese (2012).

Odden (1999) describes the rationale for the shift in emphasis as based on the argument that early and sustained intervention raises a strong cognitive platform which will support the more demanding work of secondary school. OECD countries display a large range of experience in relative resource levels for primary and secondary education. Some countries, like Finland, Hungary and Poland, employ more teachers in primary school relative to student numbers than in upper secondary education, while others, like France, do the opposite (Lamb and Teese, 2012). The policy of rebalancing spending in primary and secondary school is supported by research, most notably by Heckman and LaFontaine (2007) who demonstrate that the rate of return on investment in human capital is greatest in the early years of school and lowest in the later years.

The issue for the Flemish Community is first to understand why it is 1.7 times more expensive to educate a child in secondary school than in elementary school (i.e. EUR 8 589 compared to EUR 5 030) (Flemish Ministry of Education and Training, 2015). Part of the answer lies in higher salaries for teachers with a master's degree (upper secondary education). Part also lies in smaller classes and in the systemic lack of scale economies due to a fragmented curriculum and multiple, small schools serving similar geographical catchment areas. Stakeholders interviewed by the OECD review team also pointed to the lack of administrative and support staff in elementary schools compared to secondary schools. Any shift in resources to primary schools, however soundly based on educational principles, will run up against the weight of Flemish educational practice cemented in

these structures. However, if more progress is to be made in closing the equity gap, the Flemish authorities need to start a discussion about the potential benefits of stronger investment in tackling low achievement at the earlier stages of education.

Gather data on locally-raised funds and the goods and services that these provide

Flemish schools apply the operating grant to a range of different needs, including utility charges, administrative overheads, contributions to association activities, and supplementing parental charges for materials and excursions. During the OECD visit, respondents indicated that the operating grant gave schools a degree of flexibility, particularly those serving disadvantaged communities. These schools are under pressure to make up for what families are unable to provide, even when charges are modest. Where schools are faced with a high level of social need, the concept of "operating costs" changes meaning. Schools may find themselves supplying meals, organising for medical support, resolving family issues, managing complex behavioural problems, combating low attendance and unauthorised absences, ensuring that children of parents with limited financial means are not excluded from excursions and have the same materials and equipment as other children, and communicating intensively with parents, social workers, community leaders, and police. These activities consume resources and impose financial costs. They represent a burden that is heavier in socio-economically disadvantaged neighbourhoods than in others and a responsibility which may not always be perceived as "core business", but without which the core business of a school would be impaired.

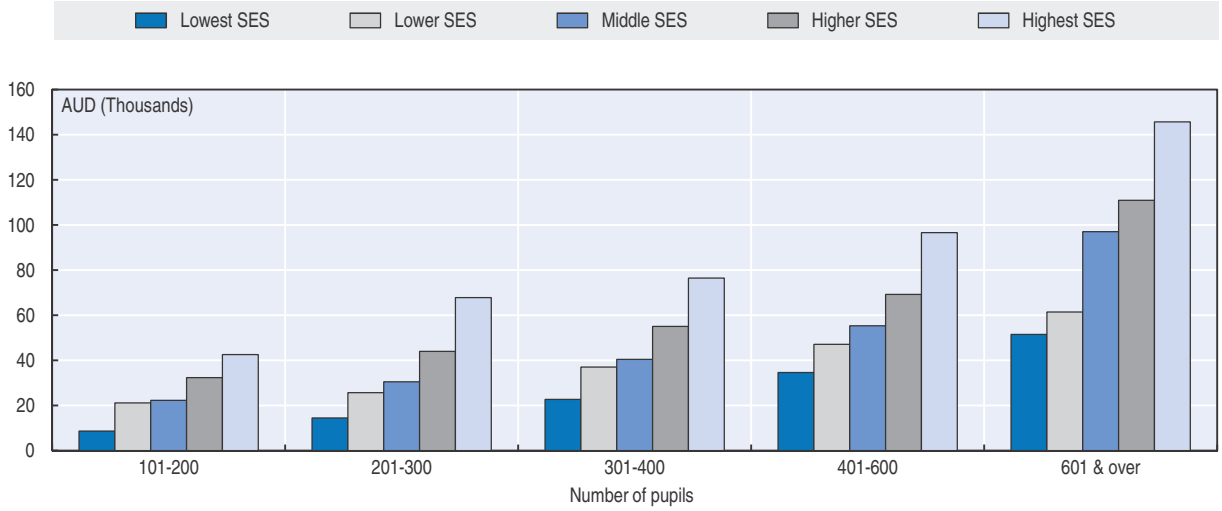
To highlight socio-economic gaps in the ability of schools to raise funds, it is helpful to look at patterns in school systems which routinely collect the relevant income data, as is done in some school systems. Figure 2.8 compares the median level of funds raised in public primary schools in Western Australia by size of school and (within this) the average SES of students (Teese, 2011). The chart shows that, within each size-band, contributions rise in line with socio-economic status, while multiplying 16 times from the smallest and lowest SES schools to the biggest and highest SES schools. It is often small schools and those located in socio-economically disadvantaged areas that experience the greatest pressure of need, due to the concentration of multiple disadvantages in them. But these have the least flexibility in budget terms.

It is essential that education authorities have good data, first on social need and second on locally-raised income. Social need refers to the range of ancillary services (and goods) supplied by schools, either directly or indirectly through the use of their resources. Locally-raised income refers to the cash contributed by parents through charges, donations and fund-raising activities.

Examine the role of equity funding and consider harmonising approaches in elementary and secondary schooling on the basis of common objectives

Equity funding is built into the way teaching hours are allocated in elementary school through student coefficients which reflect socio-economic challenges. In secondary school, equity funding comes through the equal opportunities (GOK) policy in which schools receive a top-up of teaching hours. It is difficult to assess whether a secondary school student with given family characteristics receives the same level of support as an elementary school student with the same characteristics. The entitlement to additional teaching hours is calculated on a different basis and distributed according to different criteria. Just as elementary schools and secondary schools are viewed as two separate

Figure 2.8. **Median locally-raised funds in Western Australian primary schools by size and SES, 2008**



Source: Teese, R. (2011), The Review of School Funding in Western Australia: Background, Key Research Findings and Implications, WA Corporate Executive Briefing, Perth.

worlds from the point of view of overall spending per student, so students who experience disadvantages of family background are regarded also as occupying separate worlds depending on the level at which they are enrolled. Yet are the needs of an 8-year-old child whose mother never completed school so very different from the needs of a 16-year-old brother or sister? To have a common approach to equity funding is to recognise a commonality of need, though need has to be addressed in different school settings.

More generally, it needs to be considered whether the approach of tackling disadvantage through supplementary hours in secondary education is preferable to building support into the formula allocation of teaching hours, as is the case in primary education. The potential advantages of supplementary hours include the capacity to evaluate identifiable initiatives, to terminate ineffective ones, to stimulate innovation through financial incentives, to circulate knowledge of good practice and possibly also to circulate staff. The potential disadvantages include lack of focus and continuity, dispersal of resources across widely varying contexts and challenges, the lack of impact on mainstream school culture and practice, and an outcome of "compensation for failure" rather than real growth in student learning and progression. Integrating equity supplements in the formula allocation of teaching through loadings would not necessarily overcome weaknesses in a supplementary grants programme. But an integrated approach offers greater certainty for schools and greater flexibility in the use of staff, and these are important desiderata as is the need for a transparent and formative system of evaluation.

As we have argued above, the use of programme- and course-related student coefficients in secondary education appears as a substitute for differential loadings for socio-economic factors. Hence, the issue is whether the overall approach in secondary education – a combination of top-up GOK hours and course coefficients – is the best way to reduce unequal student learning outcomes. It might be more transparent and effective to use SES coefficients (as in elementary school), but monitor and evaluate how schools use the additional teaching hours and develop a repertoire of effective intervention strategies to guide schools in good practice.

Notes

1. The amounts are adapted to the evolution of consumption prices. For the 2015/16 school year, the maximum charge was set EUR 45 for pre-primary and EUR 84 for primary education.
2. In special education, the size of the grant is determined by the type of special education facility attended by a student.
3. However, this coefficient varies slightly between schools from different networks. While the coefficient in a sample Community schools was EUR 82.566575, it was EUR 83.962123 in a grant-aided private school of similar size. The reason for this marginal difference (expressed with a high level of precision) is largely historical and relates to a category of personnel under an older system of funding. There is a group of employees in the public school system who are funded through an older financing system. To compensate for this difference, grant-aided private schools receive a slightly higher budget. This system will be phased out by 2020 as employees hired under the old financing system will be retired.
4. The groups represent the following clusters of study areas: i) administration and distribution, sports; ii) chemistry, industrial techniques, agriculture, food, etc.; iii) hotel, clothing; iv) electricity; v) graphical techniques; vi) dentistry, social security, nursery, etc.; vii) building, textiles, metal; viii) glass-making techniques.
5. There are 3 types of certificates connected to decisions on study progression at the end of each school year. Students receiving an A certificate can proceed to the following year level without restrictions in the programme. Those receiving a B certificate are allowed to progress to the following year in certain programmes but not in others. Students with a B certificate who wish to continue in a programme for which direct progression is not allowed will have to repeat the year and obtain an A certificate. Finally, the C certificate is a year repetition decision; students obtaining a C certificate are not allowed to progress to the following grade in any programme.
6. Referring to school education only and taking into account growth in student numbers (2011-2013).
7. However, school boards do not make decisions about salaries. This will be discussed in Chapter 4.
8. The performance gap between students from different socio-economic background cannot be regarded purely as a reflection of different levels of cultural (including linguistic) capital, as if the organisation of the school system and educational practice did not contribute to social inequalities. Academic selection - which arguably occurs at the end of primary school rather than at age 14 – is one practice which can be shown to promote socio-economic selection. This is reflected in the disproportionate allocation of socio-economically disadvantaged students to TSO and BSO streams (Pearson Foundation, 2013; Varin, 2006). In these streams, students enrol in less academically demanding courses. Less is demanded of them, and these lower expectations contribute to poorer learning outcomes for socio-economically disadvantaged students. Grade repetition, which is widespread in the Flemish Community (Chapter 1), is another practice which contributes to social selection. The costs of grade repetition are not insignificant and the impact on students often negative. Not all grade-repeaters come from poorer homes or immigrant backgrounds, but many do (Varin, 2006).

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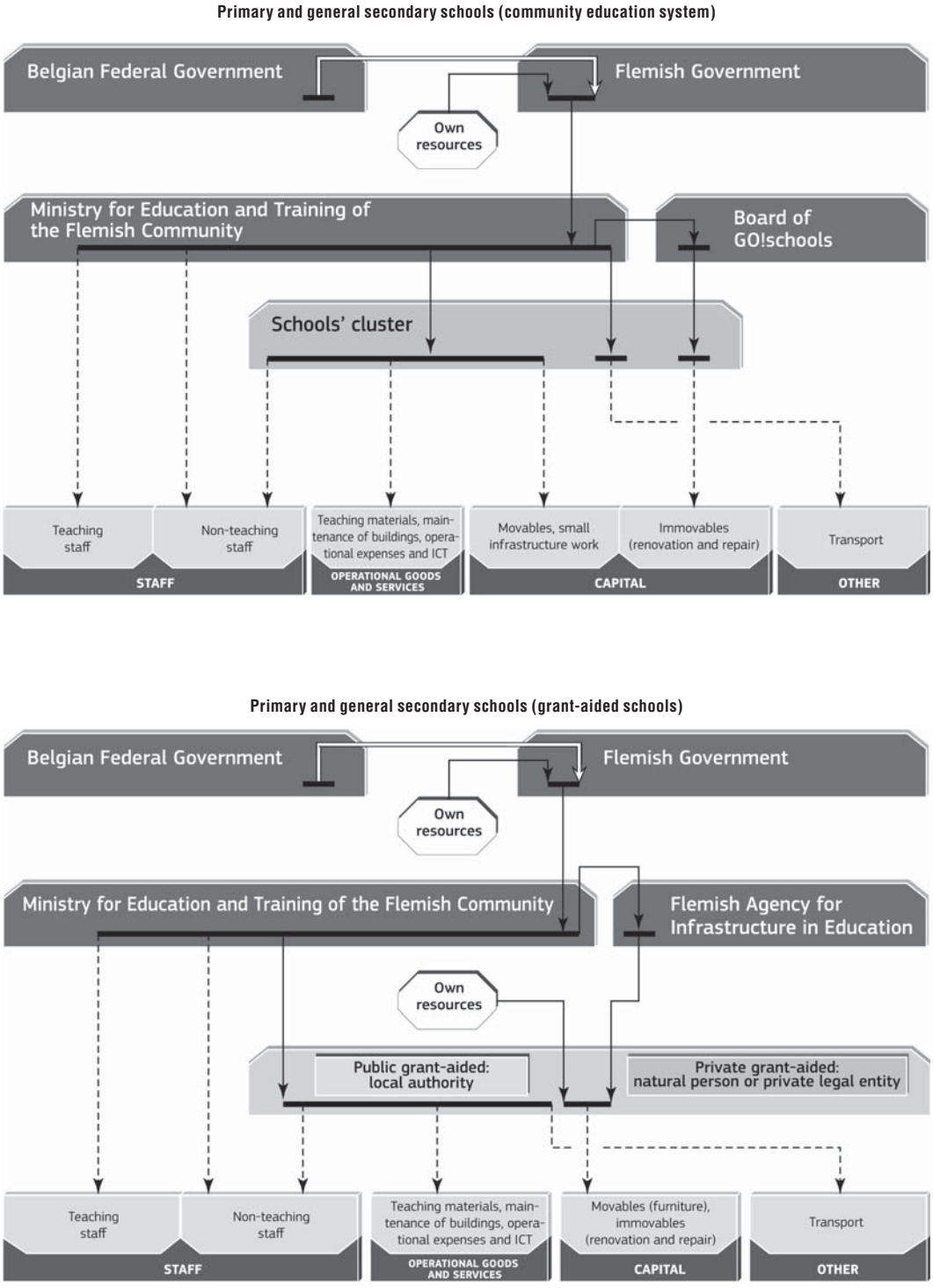
ANNEX 2.A1

Funding flows in the Flemish Community of Belgium

Figure 2.A1.1. **Funding flows in the Flemish Community of Belgium**



Source: European Commission/EACEA/Eurydice (2014), *Financing Schools in Europe: Mechanisms, Methods and Criteria in Public Funding*, Eurydice Report, Publications Office of the European Union, Luxembourg.

ANNEX 2.A2

Calculation of the operating grant for a sample Elementary School

Calculation of the operating grant for a sample elementary school (Community education network, Brussels), extract from an official letter sent to the school by AgODI, 2014/15 school year

Objective differences

Objective differences	Number of students	Money value per student (EUR)	Amount for objective differences (EUR)
Philosophy-of-life courses	98	30.153983	2955.09
Neutral education	179	20.102655	3598.38
Total for objective differences			6553.47

Student characteristics

Student characteristics	Number of students	"Corrected" number of students	Money value per characteristic per student (EUR)	Amount per characteristic (EUR)
Language spoken at home	166	113.120901	146.689638	16593.66
Mother's level of education	117	100.941164	122.753547	12390.89
Eligibility for a study grant	120	91.011413	120.833022	10997.18
Place of residence	175	156.803032	99.780364	15645.86
Total for student characteristics				55627.59

School characteristics

School characteristics	Number of students	Number of points	Money value per point (EUR)	Amount per level of education (EUR)
Pre-primary education	81	430.0128	82.566575	35504.68
Primary education	98	784	82.566575	64732.19
Total for school characteristics				100236.87

Operating grants

Amount for objective differences	EUR 6553.47
Amount for student characteristics	EUR 55627.59
Amount for school characteristics	EUR 100236.87
Calculated operational budget	EUR 162417.93
Advance	EUR 81319.65
Balance	EUR 81098.29

Calculation of staffing hours for a sample elementary school (Community education network, Brussels), 2014/15 school year

Pre-primary education

Student numbers according to weighting coefficient

Weighting coefficient	Number of students	Weighted number of students
1.11	81	89.91
Total	81	89.91

Teaching hours according to scales

	Weighted number of students	Number of teaching hours
School	89.91	125
Total number of teaching hours		125
Total number of teaching hours for pre-primary education according to scales after applying SES-percentage of 97.16%		**121**

SES-teaching hours

Student characteristics	% on the basis of previous school year	Number of students	Teaching hours per student	Teaching hours per characteristic
Mother's level of education		53	0.26710	14.1563
Language spoken at home not Dutch		76	0.29116	22.12816
Eligibility for a study grant	73.18	59.2758	0.11917	7.0638971
SES-teaching hours for pre-primary education				43

Additional teaching hours in order to achieve a maximum student-teacher ratio of 18.5

Student-teacher ratio	11.853659
Additional teaching hours pre-primary education	0

Primary education

Weighting coefficient	Number of students	Weighted number of students
1.11	101	112.11
Total	101	112.11

Teaching hours according to scales

	Weighted number of students	Number of teaching hours
School	112.11	151
Total number of teaching hours		151
Total number of teaching hours for primary education according to scales after applying SES-percentage of 97.16%		**147**

SES-teaching hours

Student characteristics	% on the basis of previous school year	Number of students	Teaching hours per student	Teaching hours per characteristic
Mother's level of education		66	0.26710	17.6286
Language spoken at home not Dutch		96	0.29116	27.95136
Eligibility for a study grant	73.18	73.9118	0.11917	8.8080692
SES-teaching hours for primary education				54

Additional teaching hours in order to achieve a maximum student-teacher ratio of 18.5

Student-teacher ratio	12.059701
Additional teaching hours pre-primary education	0

ANNEX 2.A3

Calculation of staffing hours and ICT points for a sample secondary school

Calculation of staffing hours and ICT points for a sample secondary school (Community education network, Herentals), extract from an official letter sent to the school by AgODI, 2014/15 school year

Calculated teaching hours

2nd stage ASO: 46 students	Disciplines concerned by the minimum package: 1 or 2 (not 2 + 2)

Teaching hours according to scales

25 × 1.90 = 47.50

21 × 1.70 = 35.70

Hours: 83.20	**83.20**

3rd stage ASO: 43 students	Disciplines concerned by the minimum package: 1 or 2 (not 2 + 2)

Teaching hours according to scales

25 × 1.90 = 47.50

18 × 1.70 = 30.60

Hours: 78.10	**78.10**

2nd stage TSO: 36 students	Disciplines concerned by the minimum package: 3

Teaching hours according to scales

25 × 0.50 = 12.50

11 × 0.30 = 3.30

Teaching hours according to groups

Group 1: 11 × 2.05 = 22.55

Group 2: 12 × 2.15 = 25.80

Group 4: 13 × 2.35 = 30.55

Hours: 94.70	Minimum package: 156.00	**156.00**

3rd stage TSO: 36 students	Disciplines concerned by the minimum package: 3

Teaching hours according to scales

25 × 0.50 = 12.50

11 × 0.30 = 3.30

Teaching hours according to groups

Group 1: 14 × 2.05 = 28.70

Group 2: 7 × 2.15 = 15.05

Group 4: 15 × 2.35 = 35.25

Hours: 94.80	Minimum package: 156.00	**156.00**

2nd stage BSO: 69 students	Disciplines concerned by the minimum package: 4

Teaching hours according to scales

25 × 0.60 = 15.00

44 × 0.30 = 13.20

Teaching hours according to groups

Group 1: 17 × 2.45 = 41.65

Group 2: 18 × 2.55 = 45.90

Group 6: 34 × 3.05 = 103.70

Hours: 219.45	**219.45**

3rd stage BSO: 66 students	Disciplines concerned by the minimum package: 4

Teaching hours according to scales

25 × 0.60 = 15.00

41 × 0.30 = 12.30

Teaching hours according to groups

Group 1: 27 × 2.45 = 66.15

Group 2: 21 × 2.55 = 53.55

Group 6: 18 × 3.05 = 54.90

Hours: 201.90	**201.90**

No. of students taken into account	296.00
Teaching hours including minimum package (Y)	894.65
Teaching hours excluding minimum package	772.15

Evaluation of the minimum package

Hours according to minimum package (MP)	312.00
Hours according to coefficients (CF)	189.50
Relationship MP/Y	34.87%
Relationship CF/MP	60.74%
You retain the right to the minimum package	

Calculation of hours for philosophy-of-life courses

Study year	Norm	RC	Prot	J	Isl	Ort	Ang	Ncz	Ecr	CB	**Total**
Year 1, Stage 2, ASO	27	2	2	0	2	0	0	2	0	0	**8**
Year 2, Stage 2, ASO	27	2	0	0	2	0	0	2	0	0	**6**
Year 1, Stage 2, BSO	27	2	0	0	2	0	0	2	0	0	**6**
Year 2, Stage 2, BSO	27	2	0	0	0	0	0	2	0	0	**4**
Year 1, Stage 2, TSO	27	2	0	0	2	0	0	2	0	0	**6**
Year 2, Stage 2, TSO	27	2	0	0	2	0	0	2	0	0	**6**
Year 1, Stage 3, ASO	27	2	0	0	2	0	0	2	0	0	**6**
Year 2, Stage 3, ASO	27	2	0	0	2	0	0	2	0	0	**6**
Year 1, Stage 3, BSO	27	2	0	0	0	0	0	2	0	0	**4**
Year 2, Stage 3, BSO	27	2	0	0	2	0	0	2	0	0	**6**
Year 3, Stage 3, BSO	27	2	0	0	0	0	0	2	0	0	**4**
Year 1, Stage 3, TSO	27	2	0	0	0	0	0	2	0	0	**4**
Year 2, Stage 3, TSO	27	2	0	0	0	0	0	2	0	0	**4**
	Total	**26**	**2**	**0**	**16**	**0**	**0**	**26**	**0**	**0**	**70**

RC: Roman Catholic; Pro: Protestant; J: Jewish; Isl: Islamic; Ort: Orthodox; Ang: Anglican; Ncz: Non-confessional ethics; Ecr: Éthique et culture réligieuse (non-recognised option); CB: Cultural awareness (non-recognised option).

Utilisation percentage

Type of hours	Number of hours	Utilisation percentage	Total
Generated teaching hours	582.65	96.57	563
Minimum package	312.00	98.57	308
Teaching hours for philosophy-of-life courses	70.00	98.00	69

Calculation of ICT points

Stream	Number of students	Weighting	Total
A stream	161	1.00	161.00
B stream	135	1.25	168.75
HS-312 (part-time vocational secondary education)	234	1.25	292.50
Total weighted number of students			622.25
Envelope of points (Coefficient 0.03969)			25

Summary overview

Generated teaching hours	871
Teaching hours for philosophy-of-life courses	69
Total number of teaching hours	940
Points for ICT co-ordination	25