

Expenditure Per Class and Per Student in the Primary School Education System

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Taub Center for Social Policy Studies in Israel

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Introduction

In 2018, the first of a series of papers was published on budgeting per class and per student (Blass & Bleikh, 2018). That paper analyzed expenditure per class and per student in the Official regular primary education system in 2017 (Grades 1–6 only). It focused on variables that determine the allocation per class and per student. The findings were that most of the budget is allocated to schools according to fixed and objective formulas which are intended to divide resources fairly and equally, according to selected school characteristics, such as the Nurture Index, participation in the long school day program, and school size.¹ As was shown, only a relatively small share of the differences in budget per class and per student between schools can be attributed to supervisory authority. Furthermore, it was found that the budget allocated to the Hebrew State-religious schools was the largest (due to, among other things, allocations for religious needs and other, sometimes unspecified, needs) while the budget allocated to Arab schools was the smallest, even after controlling for a variety of school characteristics.

The full project (subject to the accessibility of data) will include all of the education levels in the various frameworks — from preschool through to high school, in all of the Official education sectors and in Recognized education schools. In this work, primary school students are divided into three educational frameworks that are distinguished by their legal status. The three frameworks are:

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1 See the Appendix for a more detailed explanation of the Israeli education system in all of its complexities.

(a) Official education where about 74 percent of students learn. (b) Recognized education where about 13 percent of students learn. These are primarily Haredi institutions as well as a large group of State Arab schools and a small number of Hebrew State and State-religious schools. Exempt schools, although of a separate legal status, are included in the Recognized schools in this work. (c) Network schools are the two Haredi Networks. In terms of main budgeting criteria, these schools are similar to Official education; about 13 percent of students are in Network schools. The current paper also focuses on primary education as did the first one, although it expands the discussion in several ways:

- a. It relates to the entire primary regular education system and also includes the Recognized system and Exempt schools, which were not included in the previous paper.²
- b. It includes the changes that occurred between 2014 and 2018.
- c. It focuses on the issue of affirmative action or in terms of the Ministry of Education differential budgeting and its impact on inequality of resource allocation between the various sectors.

The primary school education system

The various education frameworks: The budget criteria

The declared intention of the Ministry of Education to give budgeting preference to the Official education system results in a different budget systems and budgeting criteria for primary schools in the Official system and Recognized system. There are several different frameworks within the Recognized education system: two Haredi networks — Independent education and Ma'ayan Hahinuch Hatorani education; other Haredi schools; Arab schools (most of them church-affiliated); Hebrew State schools (which are few in number); Hebrew State-religious schools (which are few in number); and Exempt schools.

2 The Official education system also includes a few Haredi schools as part of an effort by the Ministry of Education to create a Haredi stream in the Official education system, and, therefore, they enjoy a more generous budget allocation.

All of these systems are budgeted in a different way from Official education, and there are also differences in budgeting criterion between the different frameworks. In what follows, we will briefly review the criteria that differentiate between the budgeting of Official schools and the budgeting of Recognized schools. The discussion will be based primarily on publications of the Knesset Research and Information Center (Weisblau, 2016; 2017).

Most of the budgeting of teaching hours in the education system is by means of the allocation of “weekly work hours.”³ In the Official primary education system, payment is made by the Ministry of Education directly to teachers while in the Recognized schools it is by way of the school owners. The owners are allocated an amount that is a product of the number of weekly hours and the cost per weekly hour in the school (which is referred to as “cost of a work hour”) plus accompanying costs. According to Ministry of Education data, the average cost of a work hour in the Official education system in the 2015/16 school year was significantly higher (36 percent) than in the Recognized education system (Weisblau, 2016). The main reason for this is that the teachers in the Recognized schools were not included in the *Ofek Hadash* labor agreement.⁴ This budgeting system means that the budget available for the various schools’ operating needs is determined primarily by two variables: number of working hours allocated to the school and their cost. Therefore, it may be the case that schools with the same number of weekly working hours receive a different budget and schools with a different number of hours receive the identical budget. The number of teaching hours budgeted by the Ministry of Education to schools that are not Official schools is determined as a percentage of the budgets of Official schools, according to the following rules:

1. The Recognized schools that belong to the large Haredi Networks (Ma’ayan Hahinuch Hatorani education and the Center for Independent Education) are budgeted according to Paragraph 3a of the Budget Principles Law, 1985 and according to objective and uniform criteria, in the same way as the Official schools, as is the case for all children in Israel.

3 The accepted term in the Ministry of Education is “teaching hours”; nonetheless, we have chosen the term “work hours” since a teaching position includes, apart from actual teaching in front of a class or a small group, hours devoted to preparing class lessons, checking exams, meetings with parents, etc.

4 Although this is the main reason, there are other reasons which we will not detail here.

2. Recognized schools that do not belong to the Networks are budgeted at a rate of at most 75 percent of the basic standard for a similar Official school.
3. Exempt schools are budgeted at a rate of 55 percent of the basic standard for a similar Official school.

According to the Ministry of Education criteria, the budgeting of Recognized primary schools is conditional on meeting certain criteria, which vary from school to school, and include the extent to which core subjects are included in the curriculum, admission policies that do not discriminate between students based on ethnic group, gender and/or previous academic achievement, participation in the Meitzav exams.⁵

Descriptive statistics — 2018

Table 1a and 1b present the breakdown of students in the primary school system according to the school characteristics included in this study (Nurture Index quintiles, size of the school, long school day, and inclusion of special education students).

5 This is meant to be evaluated according to a comparison of the distribution of students in the school to that of a school in the same school district. The criterion is not meant to prevent the acceptance of students who do not fit the school's outlook and religious way of life.

Table 1. Distribution of students according to school characteristics, 2018

a. Official system	Hebrew State	Hebrew State-religious	Haredi	Arab	Druze	Bedouin		
School Nurture Index quintile								
Strongest quintile	48%	21%	5%	—	—	—		
2	22%	40%	29%	2%	—	—		
3	15%	23%	28%	16%	16%	—		
4	9%	13%	23%	25%	49%	7%		
Weakest quintile	6%	3%	14%	57%	36%	93%		
School size								
Small	2%	7%	59%	1%	1%	1%		
Small to medium	19%	44%	41%	18%	44%	14%		
Medium to large	39%	27%	—	43%	48%	45%		
Large	39%	22%	—	37%	7%	41%		
Long school day program								
No long school day	85%	68%	73%	74%	—	11%		
Has a long school day	15%	32%	27%	26%	100%	89%		
Special education								
No special ed classes	37%	44%	94%	10%	14%	16%		
Has special ed classes	63%	56%	6%	90%	86%	84%		
b. Recognized system	Hebrew State	Hebrew State-religious	Arab	Haredi	Haredi-Maayan Hahinuch	Haredi-Independent	Haredi-Exempt	Total
School Nurture Index quintile								
Strongest quintile	83%	—	2%	13%	1%	18%	16%	25%
2	13%	83%	22%	16%	14%	26%	21%	20%
3	—	17%	22%	20%	27%	37%	19%	19%
4	—	—	24%	33%	39%	12%	37%	17%
Weakest quintile	4%	—	30%	18%	19%	6%	6%	19%
School size								
Small	34%	34%	9%	21%	25%	8%	19%	6%
Small to medium	30%	66%	22%	42%	53%	19%	43%	26%
Medium to large	—	—	24%	22%	17%	15%	21%	33%
Large	36%	—	45%	14%	5%	58%	17%	35%
Long school day program								
No long day	100%	100%	100%	100%	48%	69%	100%	74%
Has long day	—	—	—	—	52%	31%	—	26%
Special education								
No special ed	100%	100%	100%	84%	67%	63%	100%	44%
Has special ed	—	—	—	16%	33%	37%	—	56%

Note: According to the definitions established in an earlier paper (Blass & Bleikh, 2018), a small school has up to 180 students; a small to mid-size school has 181–360 students; a mid-size to large school has 361–540 students; and a large school has over 540 students.

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

The tables show the following:

- 1. The distribution of students according to socioeconomic status in the Official education system.** In the Hebrew State education system, 70 percent of the students belong to the two higher socioeconomic quintiles (Nurture Index groups 1 and 2), 61 percent in the State-religious education system, and in the Arab education system there are almost no schools in these quintiles.
- 2. The distribution of students according to socioeconomic status in non-Haredi schools in the Recognized education system.** Although there are only a few of these schools (27 in the Hebrew State education system and 4 in the State-religious education system), in general, their students belong to the higher socioeconomic status quintiles. The Recognized Arab education system is larger in size and the socioeconomic status of students is much higher than in the Official Arab education system. To illustrate, we would mention that in the Official Arab education system the number of students attending schools in the two highest socioeconomic quintiles is negligible while in the Recognized Arab education system, 22 percent of the students are in the second Nurture Index quintile.
- 3. The distribution of students according to socioeconomic status in Haredi schools.** Students in the Independent education network of schools are the strongest in terms of socioeconomic status, while those in the Ma'ayan Hahinuch Hatorani education network are the weakest.
- 4. Long school day.** In the Hebrew education system, 15 percent of the students in the State education system, 32 percent of those in the State-religious education system, and 27 percent of those in the Official Haredi education system benefit from a long school day. Students in the Recognized education system are not eligible for this through the Ministry of Education (this is not to suggest that they do not have a long school day; rather it means that they do not receive a budget for it from the Ministry of Education). All of the students in the Druze sector and almost all of those in the Bedouin sector have an extended school day, as opposed to 26 percent in the Arab State education system. The reason for the preference given to Druze and Bedouin students is their socioeconomic background and their residence in the northern and southern (periphery) districts.

5. **Special education.** It is worthwhile mentioning that the vast majority of students in the Arabic-speaking population attend schools with special education classes while this is the case for only 63 percent of the students in the Hebrew State education system and 56 percent of the students in the State-religious education system. In the Recognized schools, there are almost no special education classes, something for which there is no solid explanation. A possible reason, which is relevant in the case of the Arab education system, is the low number of special education schools in that sector. With respect to the Haredi education system, the reluctance to recognize the need for a solution for special needs' students has an effect on the number of them receiving special education services.⁶
6. **School size.**⁷ In the Official Hebrew education system, most of the students study in large or mid-size to large schools, although there is a significant difference between the State education system (78 percent) and the State-religious education system (49 percent). In the Haredi education system, the picture is more complicated. Most students in the Ma'ayan Hahinuch Hatorani network and in the Official Haredi education system attend small schools, while 58 percent of students in the Independent education network attend large schools. Students in the Recognized Haredi education system lie somewhere in the middle. Among the Arabic-speaking population, the vast majority of students attend large or mid-size to large schools.

6 In this context, see, for example, the statement by the State Comptroller in his report for 2001: "Based on conversations with the audit representative [...] it appears that, in Haredi society, placing a child in a special education framework is sometimes met by intense opposition from the parents and the audit showed that, as in the State education system, in the Haredi education system, the Ministry has not acted in a systemic way to train teachers and principals in the regular schools to integrate special needs students in their classes. In addition, students in the regular Haredi schools who are in need of paramedical treatment are not getting it." (State Comptroller, 2002, p. 224).

7 According to the definitions established in an earlier paper (Blass & Bleikh, 2018), a small school has up to 180 students; a small to mid-size school has 181–360 students; a mid-size to large school has 361–540 students; and a large school has over 540 students. Exempt schools are included with the Recognized schools for this work.

Table 2 shows that there is in general a positive correlation between school size and class size. The average class size in schools of the same size varies from one sector to another, particularly in the Arab sector, where classes are usually smaller than in the Hebrew sector. This is a phenomenon that has grown in recent years and is evidence of the improvement in the situation of Arab education relative to Hebrew education, a subject dealt with in a different publication (Blass, 2017).

Table 2. Class size according to school size, supervisory authority, sector, and legal status, 2018

	Small	Small- medium	Medium-large	Large	Total
Hebrew State	22.7	25.9	28.5	30.6	28.5
Hebrew State-religious	20.6	25.5	27.4	29.9	26.5
Haredi	15.7	23.7	—	—	18.2
Arab	21.7	24.4	25.8	27.9	26.2
Druze	17.6	24.4	25.8	27.1	25.1
Bedouin	22.5	24.4	25.0	27.4	25.8
Official	20.4	25.4	27.4	29.7	27.3
Hebrew State-Recognized	18.4	26.3	—	30.5	24.0
Hebrew State-religious-Recognized	23.2	24.7	—	—	24.2
Arab-Recognized	20.8	27.2	29.9	33.3	29.5
Haredi-Recognized	17.3	26.0	27.2	33.0	24.4
Haredi-Exempt	18.0	25.3	27.7	31.3	24.7
Recognized	18.2	25.8	28.3	32.5	25.8
Haredi-Ma'ayan Hahinuch Hatorani	16.7	23.9	25.3	27.7	22.0
Haredi-Independent	17.1	25.2	26.3	31.0	27.3
Haredi Networks	16.9	24.5	26.0	30.8	25.4
Total	18.5	25.3	27.3	30.1	26.8

Note: According to the definitions established in an earlier paper (Blass & Bleikh, 2018), a small school has up to 180 students; a small to mid-size school has 181–360 students; a mid-size to large school has 361–540 students; and a large school has over 540 students. Exempt schools are included with the Recognized schools for this work.

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

The total budget in 2018

Figure 1 presents the total budget per class and per student on the basis of data published by the Ministry of Education on its Economic and Budget Authority site. The figures relate to the budget allocated only by the Ministry of Education and do not include the budgets provided to the schools by the local authorities, by fees collected from parents, and by non-profit organizations. The figures provide the following insights:

1. In the Official education system, the budget per class and per student grows as the school's socioeconomic level is lower (it has a higher Nurture Index). This is true both in the Hebrew sector and in the Arab education sector. Nonetheless, the budget gaps in favor of students with a low socioeconomic background are much larger in the Hebrew sector than in the Arab sector. In the Haredi education system, there is affirmative action in the Network schools. The main sources for budgeting the addition per student in weaker populations are as follows:
 - a. The Nurture Basket, which provides additional working hours according to the school's Nurture Index.
 - b. Differential class size which sets a lower maximum class size for budgeting purposes in schools with a higher Nurture Index (a weaker population).
 - c. A long school day which is provided to schools serving populations with a low socioeconomic status (an addition of 5 to 8 weekly hours, according to the grade level).

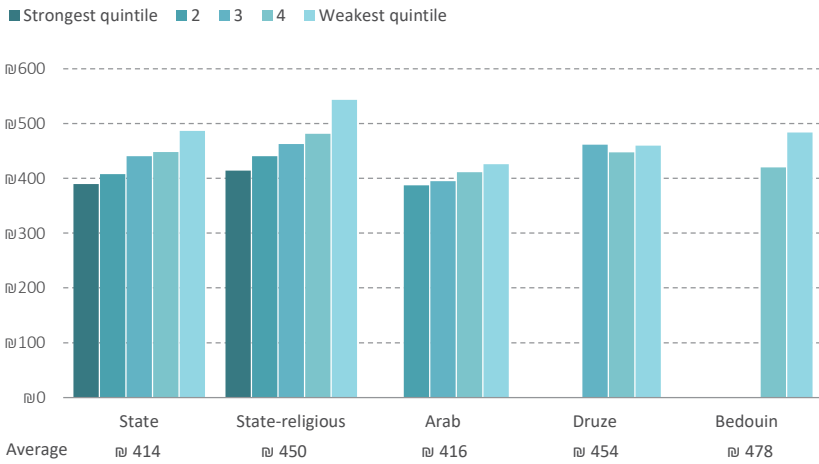
With respect to budget per class, the differences are less pronounced. On the student level, the gap between budget per student in the weakest and strongest quintiles was 34 percent in 2018 while on the class level the gap was only 15 percent.

2. In the Official education system, it can be seen that the average expenditure per class and per student is the highest in the Druze and Bedouin sectors and the lowest in the Hebrew State education system. The expenditure per class and per student in the Recognized education system is significantly lower than in the Official education system as a result of the Ministry of Education policy to encourage the Official public education system.

3. In the Official education system and in the Nurture Index quintiles, the State-religious education system is budgeted on the highest level both per student and per class while the Arab education system is budgeted on the lowest level. In the Recognized education system, the Exempt schools are budgeted at the lowest level.

Figure 1. Budget per class and per student in primary school, 2018
NIS thousands

a. Budget per class, Official education



b. Budget per class, Unofficial education

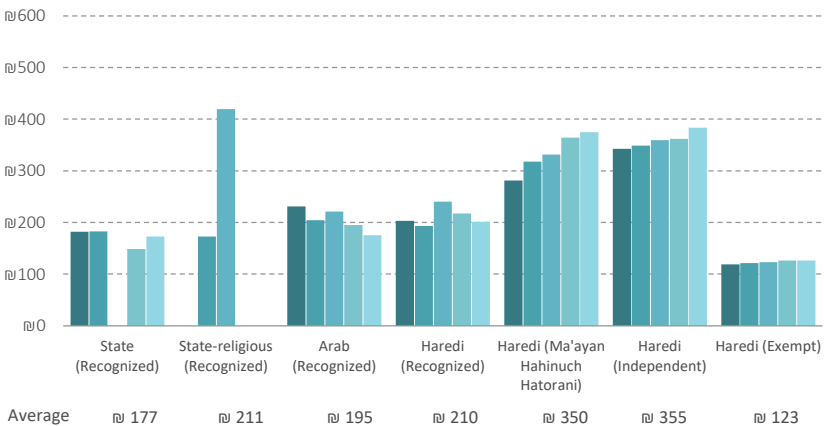
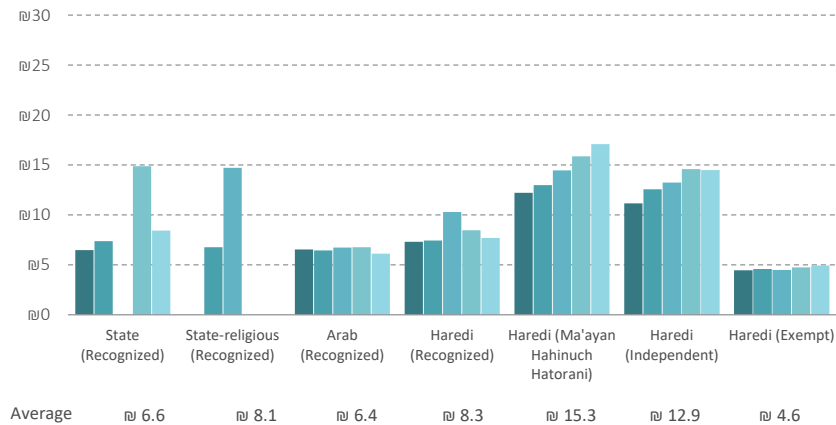


Figure 1 (continued). Budget per class and per student in primary school, 2018
NIS thousands

c. Budget per student, Official education



d. Budget per student, Unofficial education



Note: There is a low number of Recognized schools in the Hebrew Official education system (in the State-religious system, there are four schools that are in the second and third quintiles; in the Hebrew State education system there are only three that are in the fourth and fifth quintiles).

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education.

The changes in the primary school education system between 2014 and 2018

This section of the study focuses on the main changes that occurred in the primary education system between 2014 and 2018, which is the most recent year for which there is data. During this period, the Ministry of Education adopted two measures intended to increase affirmative action: a partial return to differential budgeting and the gradual lowering of the maximum number of students per class. Another process, which is independent of Ministry of Education policies and which also had an influence on the scope of affirmative action, involves the changing birth rates in the population and their implications for the numbers of students.⁸ In order to restore differential budgeting in primary education and in the middle schools, a sum of NIS 416 million was allocated in the Ministry of Education's budget for the years 2015 to 2018 (Appendix Table 1). In order to reduce class size by lowering the maximum number of students per class, a sum of NIS 317 million was allocated at the same time. It is important to mention that this is the budget approved for those purposes and not necessarily the budget that was actually spent, which is usually lower (Blass & Cogan, 2014). The following will examine the principal changes that occurred in the primary education system between 2014 and 2018.

Demographic changes

The distribution of students by sector, supervisory authority, and legal status in primary education in 2018 was not significantly different from that in 2014 (see Table 3), although there were some changes. The share of the Hebrew State education system (Official and Recognized) grew by 1 percentage point; the share of the State-religious education system, and the two large Haredi Networks grew by a little less than 1 percentage point each, while that of Arab education fell by about 2.5 percentage points. If this indicates the beginning of a trend, then these changes are not negligible.

8 A drop in birth rates, when it is not accompanied by changes in the number of classes, can affect average class size, which in turn affects budget per student.

Table 3. Distribution of students in primary school education according to sector, supervisory authority, and legal status

	2014	2018	Difference
Hebrew State	37.8%	38.9%	1.1%
Hebrew State-religious	13.5%	14.2%	0.7%
Haredi (State)	0.1%	0.5%	0.4%
Arab	14.4%	12.8%	-1.7%
Druze	1.8%	1.7%	-0.2%
Bedouin	6.0%	5.5%	-0.5%
Hebrew State-Recognized	0.6%	0.6%	0.0%
Hebrew State-religious-Recognized	0.2%	0.1%	-0.1%
Arab-Recognized	3.8%	3.5%	-0.3%
Haredi-Recognized	3.5%	2.6%	-0.9%
Haredi-Ma'ayan Hahinuch Hatorani	3.8%	4.5%	0.7%
Haredi-Independent	9.1%	10.0%	0.9%
Haredi-Exempt	5.3%	5.2%	-0.1%

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

Changes in class size

Class size has significant implications for allocation per class and per student.

SPOTLIGHT

What is meant by class size?

In any discussion of class size, a variety of definitions are often used with different impact on the results. Thus, a distinction should be made between “maximum class size,” “average class size,” “average size of a regular class,” “maximum class size for budget purposes,” and “actual class size.”⁹

Maximum class size is the number of students in a class beyond which — according to the agreements with the teachers unions — the class is to be divided (for example, if the number of students in the 4th grade is 81, there will be three classes and if the number of students is 41, there will be two).

Average class size is the total number of students divided by the number of classes, including students in special education classes.

9 When the former Minister of Education Naftali Bennett announced that class size had been lowered from 40 to 32 students, he was essentially referring to “maximum class size.” It is important that the declaration of a lowering of maximum class size is somewhat imprecise. In cases where the maximum was lowered, it was lowered to 34 students, and only with respect to class size for budgeting purposes in schools with a high Nurture Index (a weak population) was the maximum lowered to 32. For an in-depth discussion of the issue, see Sharon and Brill (2019).

Average size of a regular class is the total number of students divided by the number of classes, excluding students in special education.

Maximum class size for budgeting purposes relates to a situation in which it is difficult to divide classes with 34 to 39 students into two classes of 20 students or fewer. In such a case, the class will not be split and the class size for budgeting purposes will be between 32 and 40 (depending on the school's Nurture Index) and the standard hours per class will be increased to compensate for the class not being divided. Thus, for example, if a school has 40 students in Grade 4, then there will be one Grade 4 class; if the class belongs to a high socioeconomic level (Nurture Index of 1) it will be budgeted according to one Grade 4 class, and if it serves students at the lowest socioeconomic level it will budgeted as if it has two Grade 4 classes with 20 students in each class.

Actual class size is the most interesting and most important variable for public discourse (at a time when for purposes of evaluating per class and per student allocations it is important to consider the number of classes for budgeting purposes). Therefore, when describing developments in the education system, we refer to actual class size and when discussing trends in the inequality of allocations, we relate to size of class for budgeting purposes.

The average actual size of a regular class in the Official primary education system in Israel fell from 30 in 2000 to 27.5 in 2018, with the number varying across supervisory authorities and sector and also according to other criteria, such as the school's legal status, district, etc.¹⁰

10 See Ministry of Education data on the Wide Perspective site.

Table 4a and 4b present the changes in the actual size of classes in regular education between 2014 and 2018 in the primary education system as a whole.¹¹ First, the data are examined according to the school's Nurture Index and then according to school size. Naturally, there is a difference between the maximum number of students per class and the actual average numbers. The current maximum number of students per class (only in some of the grades) is 40 while the average number is about 28. Between 2014 and 2018, class size declined by 0.6 students per class. Reducing the maximum number of students per class to 32 at this pace, in accordance with the government decision,¹² will require a considerable amount of time to implement.¹³ Moreover, it can be seen that schools serving more affluent populations (the first and second quintiles) benefited from the Ministry of Education policy more than schools serving weaker populations. This is not surprising since these schools, and particularly those in the Hebrew State education system, were larger with the largest class sizes, as well. In this sense, the move to reduce the number of students per class benefited the populations with a higher socioeconomic status, while it also served to strengthen public education by reducing the temptation to send a child to Recognized schools, where classes are smaller.

As can be seen from Table 4a, the changes in class size were not uniform across sectors and supervisory authority. In the Hebrew State and State-religious education systems, class size decreased in schools with a higher socioeconomic status and, increased in schools serving weaker populations. In contrast, in the Arab education system, classes shrank in all the quintiles, although it should be recalled that there are almost no Arab schools serving affluent populations (the first and second quintiles). In the Haredi education system, the outcomes varied.

11 On the relative differences over time between all schools and those that have changed their status see the discussion on changes in budget inequality.

12 Government Decision 4275 (hk/159) from November 27, 2008.

13 Reducing the maximum size by 25 percent (from 40 to 32) is meant to also reduce the average number of students per class. Given the distribution of class size in Israel and without any changes in other characteristics of the system, the average will have to decline to about 23.5 students per class. Therefore, if during a period of four years it dropped by 0.6 students, almost 30 years will be required in order to reach the target.

Table 4a. Changes in actual class size between 2014 and 2018

By Nurture Index quintile

	Strongest quintile	2	3	4	Weakest quintile	Total change
Hebrew State	-1.5	-1.1	0.0	0.1	0.1	-0.9
Hebrew State-religious	-0.9	-0.2	-0.3	0.9	1.9	0.0
Arab	—	1.3	-1.5	-1.2	-1.4	-1.3
Druze	—	—	-1.7	-2.0	-1.5	-1.8
Bedouin	—	—	—	-2.7	-1.2	-1.3
Official	-1.4	-0.9	-0.5	-0.8	-0.9	-0.9
Hebrew State-Recognized	-1.7	2.4	—	-3.0	-4.7	-2.0
Hebrew State-religious-Recognized	—	3.2	-1.6	—	—	-2.6
Arab-Recognized	—	-0.7	1.5	-1.9	-2.6	-1.2
Haredi-Recognized	-0.9	-0.1	0.0	0.5	-0.3	0.1
Haredi-Exempt	0.0	0.8	0.6	1.1	-0.5	0.7
Recognized	-0.3	0.0	1.0	0.2	-1.2	0.0
Haredi-Ma'ayan Hahinuch Hatorani	1.1	1.2	2.0	1.9	0.4	1.5
Haredi-Independent	-0.8	-0.5	0.1	0.9	2.8	-0.2
Haredi Networks	-0.7	-0.4	0.8	1.6	1.3	0.4
Total change	-1.2	-0.6	0.1	-0.3	-0.9	-0.6

Note: Quintiles do not necessarily relate to the same schools in 2014 and in 2018, since the Nurture Index quintile of many of the schools changed in the interim. The quintile data for 2014 for schools in the Official Haredi education system were not available. Exempt schools are included with the Recognized schools for this work.

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

A look at Table 4b, which describes the change in class size according to school size, indicates that here also there are those who benefit more and those who benefit less. As can be seen, those who benefited the most from the reduction in class size were students in large schools, and in particular in the Hebrew State education system and the State-religious education system and in both large and small Arab schools, where the changes were notable. There is no doubt that the most important factor in the reduction of class size in the Arab education system in this process was on the one hand a drop in the birthrate (as opposed to an increase among the National Religious population), and on the other hand, the difference in socioeconomic status that lent an advantage to schools serving weaker populations between the two groups, which contributed to a more effective implementation of the Ministry's policy.

Table 4b. Changes in actual class size between 2014 and 2018

By school size

	Small	Small - Medium	Medium - Large	Large	Total change
Hebrew State	-0.3	-0.2	-1.3	-1.7	-1.0
Hebrew State-religious	0.7	0.3	-0.9	-1.7	0.0
Arab	-3.5	-0.7	-0.8	-1.2	-1.3
Druze	-2.5	-1.4	-1.9	-1.6	-1.7
Bedouin	-1.2	-0.1	-1.2	-1.1	-1.3
Official	-0.3	-0.2	-1.2	-1.2	-0.9
Hebrew State-Recognized	0.9	0.3	0.0	-6.8	-1.4
Hebrew State-religious-Recognized	-0.1	—	—	—	-2.2
Arab-Recognized	4.2	-1.4	-0.1	-1.0	-0.6
Haredi-Recognized	0.1	1.2	1.3	0.8	0.3
Haredi-Exempt	-0.7	0.9	1.3	-0.7	0.8
Recognized	0.2	0.5	0.8	-0.9	0.3
Haredi-Ma'ayan Hahinuch Hatorani	0.6	1.2	0.9	-2.4	1.4
Haredi-Independent	-0.2	0.0	-0.4	-1.3	-0.2
Haredi Networks	0.2	0.6	0.0	-1.4	0.3
Total change	0.1	0.1	-1.0	-1.2	-0.5

Note: According to the definitions established in the earlier paper (Blass & Bleikh, 2018), a small school has up to 180 students; a small to mid-size school has 181–360 students; a mid-size to large school has 361–540 students; and a large school has over 540 students. The number of schools for which a calculation was made is not identical in each table since there data on Nurture Index quintiles were not available for all schools. Exempt schools are included with the Recognized schools for this work. Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

Changes in per class and per student budgeting

The data in Table 5a show that the total budget per class grew in all groups and all quintiles, although not to the same extent. There are differences in relative terms between the various groups and the various quintiles. The group with the largest increase in budget per class is the Recognized schools which in 2018 constituted about 18 percent of schools and about 13 percent of students.

Table 5a. Changes in budget per class between 2014 and 2018

By Nurture Index quintile

	Strongest quintile	2	3	4	Weakest quintile	Total change
Hebrew State	4%	4%	9%	8%	13%	6%
Hebrew State-religious	4%	6%	7%	8%	7%	5%
Arab	—	3%	6%	7%	10%	8%
Druze	—	—	5%	5%	9%	7%
Bedouin	—	—	—	-1%	12%	11%
Official	4%	5%	8%	8%	10%	7%
Hebrew State-Recognized	14%	35%	—	13%	19%	16%
Hebrew State-religious-Recognized	—	15%	113%	—	—	18%
Arab-Recognized	—	34%	34%	33%	29%	32%
Haredi-Recognized	12%	19%	37%	31%	21%	26%
Haredi-Exempt	14%	18%	19%	22%	22%	19%
Recognized	16%	21%	29%	22%	28%	23%
Haredi-Ma'ayan Hahinuch Hatorani	3%	5%	9%	10%	11%	9%
Haredi-Independent	2%	4%	7%	5%	9%	5%
Haredi Networks	2%	3%	8%	8%	11%	7%
Total change	4%	7%	13%	8%	11%	8%

Note: Quintiles do not necessarily relate to the same schools in 2014 and in 2018, since the Nurture Index quintile of many schools changed. The quintile data for schools in the Official Haredi education system were not available for 2014. Exempt schools are included with the Recognized schools for this work.

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

The changes in budget per student (Table 5b) were somewhat larger since in parallel to the budget increase there was also a drop in class size (primarily in the Arab education sector and somewhat less in the Hebrew State education system), which reinforced the effect of the changes in the allocation per student. Here again, one can see that budget per student grew in all the sectors and for all types of supervision. Furthermore, the increase in the budget of schools in the weak quintiles was larger than in the strong ones, and as in the

case of budget per class, the increase in budget per student in the Recognized education system is particularly large.¹⁴

Table 5b. Changes in budget per student between 2014 and 2018

By Nurture Index quintile

	Strongest quintile	2	3	4	Weakest quintile	Total change
Hebrew State	10%	7%	9%	9%	14%	10%
Hebrew State-religious	7%	7%	9%	6%	2%	6%
Arab	—	0%	13%	13%	16%	15%
Druze	—	—	16%	13%	17%	15%
Bedouin	—	—	—	13%	18%	17%
Official	9%	8%	11%	12%	15%	11%
Hebrew State-Recognized	26%	28%	—	80%	57%	29%
Hebrew State-religious-Recognized	—	13%	118%	—	—	25%
Arab-Recognized	—	40%	32%	38%	39%	37%
Haredi-Recognized	16%	13%	49%	34%	18%	28%
Haredi-Exempt	13%	17%	11%	19%	19%	16%
Recognized	19%	22%	25%	22%	31%	23%
Haredi-Ma'ayan Hahinuch Hatorani	12%	2%	4%	4%	9%	5%
Haredi-Independent	3%	7%	9%	3%	0%	7%
Haredi Networks	4%	6%	7%	4%	5%	7%
Total change	9%	10%	14%	10%	16%	11%

Note: Quintiles do not necessarily relate to the same schools in 2014 and in 2018, since the Nurture Index quintile of many schools changed. The quintile data for schools in the Official Haredi education system were not available for 2014. Exempt schools are included with the Recognized schools for this work. Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

- 14 Between 2014 and 2018, there were a number of events that apparently affected the growth in the budgets of Recognized schools. The budget for Christian Arab schools was increased following a four-week strike (Weissblau, 2017). In addition and as a result of the 2015 elections, the Yesh Atid party left the government and the Haredi parties joined the government in their place, which led to a significant increase in the budgets of the Recognized Haredi schools. Additionally, there was a highly publicized dispute between the Hebrew Reali School in Haifa and the Ministry of Education that centered on the Ministry's opposition to the school's high entrance fees. This confrontation finally led to a compromise in which the budgets provided by the Ministry of Education to Recognized non-Haredi schools were increased.

Differential budgeting policy

Changes in the primary education system: General background

The Ministry of Education has two overarching goals that can, in certain circumstances, stand in opposition to each other. One is to reduce educational gaps, and the second is to encourage and strengthen public education. The first goal is achieved by differential budgeting that considers the socioeconomic characteristics of the student population, while the second is done through preferential budgeting of Official education over Recognized and Network schools. When Haredi students in Official and Network education come from weaker socioeconomic backgrounds, though, the two goals clash. One way to deal with and solve this clash (at least partially) is to require the Recognized education system to lessen the principle differences that distinguish it from Official education. For example, the Shoshani Committee, which examined the budgeting of primary education, recommended uniform budgeting of schools and that Recognized schools adopt at least some core curriculum as well as cease admission policies that prevent integration (Shoshani Committee, 2002). Additional requirements can be set, of course, like hiring of teachers according to national union agreements, setting limits on parent's contributions, etc.

By 2014, classes and students in the Official education system in schools with a high Nurture Index (implying that the students come from a weak socioeconomic background) already had a budget advantage. Accordingly, **an increase in budgeting inequality implies that the growth in budget per class and per student over time among students with weak socioeconomic backgrounds is higher than for students with strong socioeconomic backgrounds.** In other words, when the differential level (i.e., inequality) increases, the Ministry of Education's policy goal to strengthen affirmative action is achieved and vice versa. In contrast, from the perspective of the system as a whole, the Recognized education system (which is primarily made up of Haredi schools), whose students for the most part have a low socioeconomic status, receives a smaller budget.¹⁵ Therefore, a reduction in budgeting inequality between the

15 Recognized education is budgeted at a lower level than Official education for various reasons, starting from the absence of core subjects in the curriculum (in the Haredi education system) and their employment of teachers not in accordance with national labor agreements, and ending with discriminatory student admissions policies and tuition charges.

Official education system and the Recognized education system highlights the clash in goals — **giving budgetary preference to those institutions that serve the weaker segments of the population lessens the budgetary advantage of public education.**

For many years, budget per class, which includes a budget for the Nurture Basket of services, served as the main tool for implementing the Ministry's affirmative action policy, in which larger budgets are allocated to students from weak socioeconomic backgrounds. Since the establishment of the State, the budget system in the primary education system has differed substantially between Official schools and Recognized schools (see Blass, 2010; Blass, Zussman & Tsur, 2010). In 2014, it was again decided to utilize the differential standard per student — which is a budgeting system based on preferential allocation to students from weaker socioeconomic backgrounds — but differently than its implementation between 2004 and 2008, and changes were introduced in the method of calculating the basic standard per class, where the newer calculation takes into account class size and the school's Nurture Index. The goal of this study is to determine the effect over time of those changes on per class and per student budgeting.

Changes in the primary education system: An empirical analysis

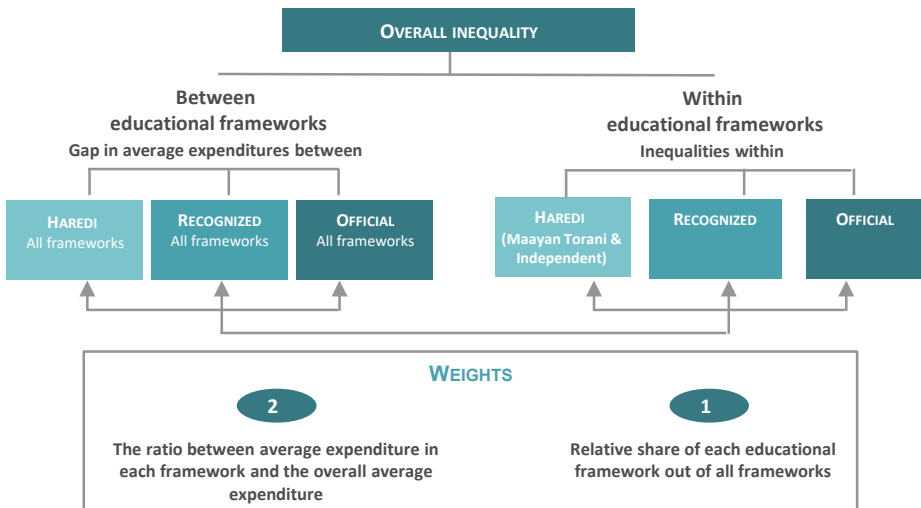
The index used to analyze inequality in budgeting per class and per student is the Theil Index (Theil, 1967).¹⁶ This index takes positive values (or zero in the case of full equality) and a higher value indicates greater inequality. The index makes it possible to divide the total population into subgroups (according to, for example, legal status, sector, supervisory authority, geographic region, etc.). In this study, we chose to examine the differential level in three education systems. As noted previously, the groups categorized are (a) Official education, with 74 percent of students;¹⁷ (b) Recognized schools, with 13 percent of students; (c) the two Haredi Networks of schools, where another 13 percent of students are educated. As shown in Figure 2, budget inequality can be broken down into two components:

16 For further details about the Theil Index, see the Appendix.

17 Official Haredi education, with relatively few students, is not included in this analysis.

1. Inequality **within** the education system. This type of inequality is the result of differences in budgeting (per student or per class) between schools belonging to the same subgroup. In the first stage the level of budgeting inequality is measured separately for each of the education systems (Official, Recognized, and Networks). Following that, the three inequality indexes are weighted (according to the Theil Index formula) in order to obtain a single index, which expresses the inequality within the three educational frameworks.
2. Inequality **between** the education systems. This type of inequality is the result of differences in average budgeting between the various education systems. This is calculated as the weighted sum of the gaps between the three education systems where only their average budget is taken into account.

Figure 2. Breakdown of inequality in expenditure within and between educational frameworks



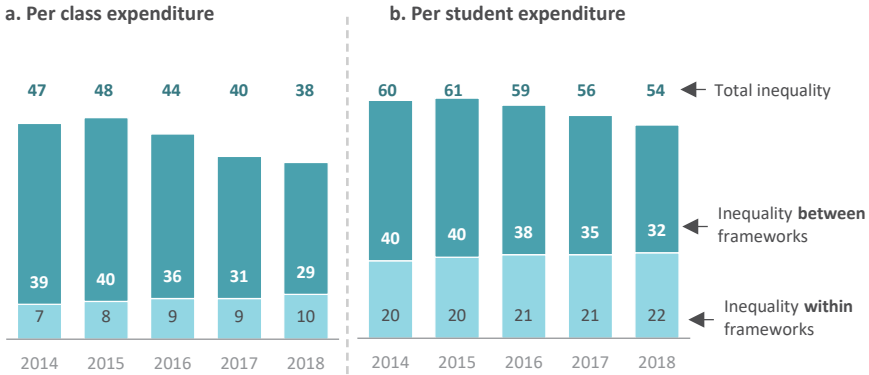
Source: Nachum Blass and Haim Bleikh, Taub Center

Figure 3 shows a drop in the level of budget inequality in the primary education system as a whole. However, this finding should be treated with caution. After breaking down total inequality into its components, it can be seen that:

1. The component of inequality **between** the three systems is significantly higher than that **within** education systems. This data reflects the significant differences in average budgeting levels between educational systems, and especially between Recognized education, which is characterized by low average expenditure, relative to other groups.
2. Over time, the component of inequality **between** the three education systems has declined substantially, which is essentially the explanation for the overall drop in inequality. This fact indicates that there has been a narrowing of gaps in the level of average budgeting.¹⁸ In this context, the rate of growth in the average budget per class and per student in the Recognized education system, which is characterized by low average expenditure, was substantially higher than for the other systems. Table 5a and 5b indicate that the rate of budget increase in the Recognized education system relative to the other education systems was higher not only on average but also in each nurture quintile.
3. The increase in inequality **within** education systems indicates an increase in the differential in budgeting within each education system. In other words, the increase in the budgets of schools serving students with a weak socioeconomic background was higher than for schools serving populations with a strong socioeconomic background.

18 The relative rate of inequality **between** the education systems within total inequality in expenditure per class dropped from 84 percent in 2014 to 75 percent in 2018. With respect to expenditure per student, the rate dropped from 67 to 60 percent during that same period.

Figure 3. Inequality in expenditure in the primary school education system, regular education



Note: According to the Theil Index, multiplied by 1,000.

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

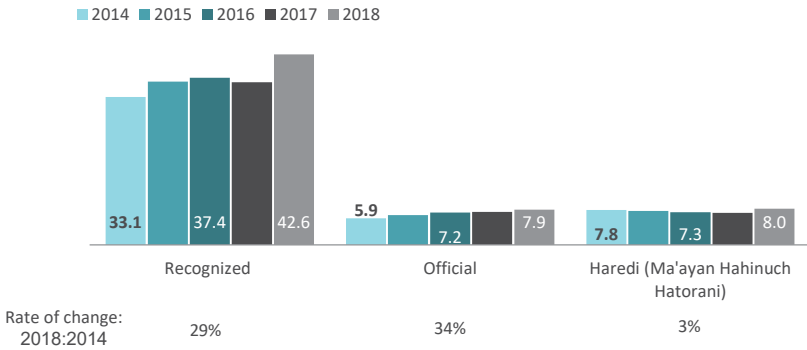
The question that arises is whether the increase in budgeting differential over time is characteristic of all three of the education systems or just some of them. Figure 4 presents the changes in levels of inequality over time within each of the three education systems. The figures show the following:

1. With respect to expenditure per class and per student, the differences in inequality between the groups (as represented by column height) reflect primarily the heterogeneity in the Recognized education system relative to the rest of the groups. As already noted, this is a relatively small group.
2. With respect to expenditure per class, there are various trends visible in differential within the various parts of the system. The figures for the Official education system indicate a consistent increase in budgeting inequality. In other words, larger budget additions were allocated to schools serving populations of students from a weaker socioeconomic background. The figures for the Recognized education system fluctuate more; nonetheless, in this group as well the differential is increasing over time. With respect to the two Haredi networks, it can be seen that between 2014 and 2017 there was a drop in the level of the differential while in 2018 the figures indicate a sharp rise.

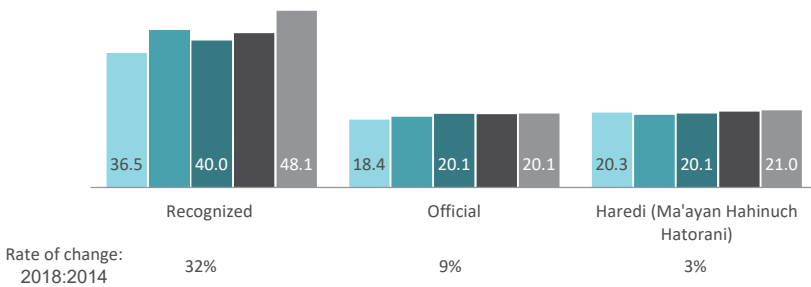
3. With respect to expenditure per student, the trends in differential levels are similar overall to the trends in expenditure per class. It is worth mentioning that in the Official education system the upward trend is more moderate than in expenditure per class. It is important to recall that, during this period, there was a reduction in class size in schools that serve stronger populations. Therefore, in terms of expenditure per student, this process moderated the Ministry of Education’s differential budgeting policy to some extent.

Figure 4. Inequality in expenditure in the primary school education system, by legal status

a. Per class expenditure



b. Per student expenditure



Note: According to the Theil Index, multiplied by 1,000. Exempt schools are included with the Recognized schools for this work.

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

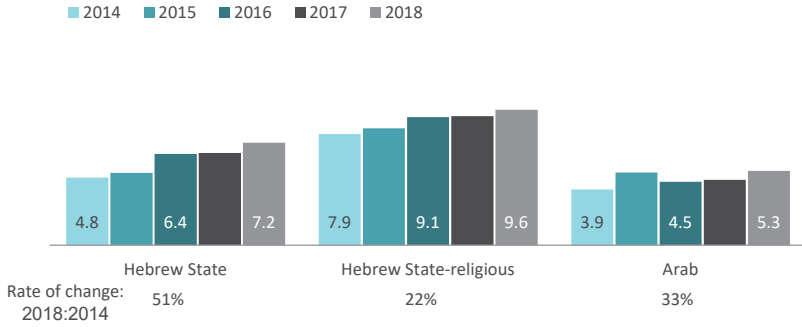
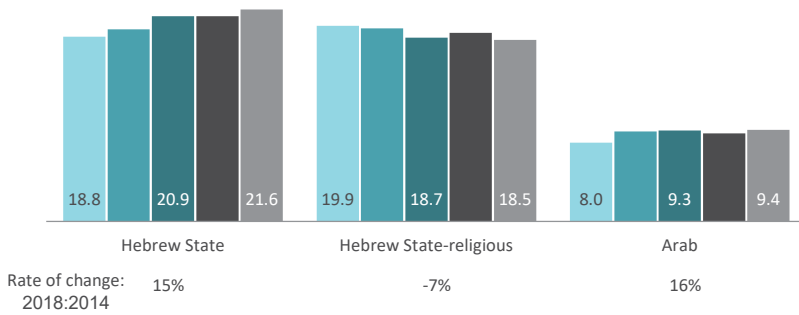
The education system is dynamic in some ways. Alongside demographic changes, there are also changes in the “status” of schools. This is seen primarily in changes in the Nurture Index and to a lesser extent in other characteristics.¹⁹ According to the data, these types of changes occurred in 40 percent of the schools operating in 2018 (37 percent in the Official education system, 53 percent in the Recognized education system and 42 percent in the two Haredi networks).²⁰ As part of this study, an analysis was carried out that is not presented here which examines the trends for schools in which no change in status occurred, which perhaps would have influenced their budgeting situation. In general, it can be said that among those schools with no change in status, the trends in differential levels are similar to those described above for all schools (see Appendix Figures 2a and 2b).

Trends in differential budgeting policy in the Official education system

As mentioned, most of the students in the primary education system attend schools in the Official system. This is a highly heterogeneous system, divided between Jews and Arabs and between State education, State-religious education and also Haredi education, although the latter accounts for only a negligible share. In the previous section, we saw that the differential level in the Official education system has risen. In this section, we look at the differential budgeting policy in the three components of the system — the Hebrew State education system, the State-religious education system, and the Arab education system. It should be emphasized that this analysis does not examine the differences in budget levels between the various parts of the system (i.e., the gap in average expenditure between the various education systems). Figure 5 describes the trends in inequality in the three education systems (Hebrew State and State-religious education and Arab education). First, it can be seen that the level of inequality in expenditure in Arab education is lower than that in Hebrew education. This is due to the fact that most of the Arab schools are budgeted in a fairly similar manner (most of them serve weaker populations).

19 There have also been changes in supervision and in legal status and there are also new schools.

20 If one relates to Nurture Index deciles rather than quintiles, the share of schools that experienced a change in one of the characteristics is much larger. For further details on schools that experienced a change in Nurture Index deciles and quintiles, see the Appendix Figure 1.

Figure 5. Inequality in expenditure in Official primary education**a. Per class expenditure****b. Per student expenditure**

Note: According to the Theil Index, multiplied by 1,000.

Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

Additionally, the differential level in expenditure per class is increasing in all of the systems. The differences in the rate of change to a large extent reflect demographic differences (a different distribution according to Nurture Index quintile).²¹ From the perspective of budget per student, the data reflect to a greater extent the changes in class size that occurred over the years (and

21 The changes in the level of budget inequality were also examined separately for schools serving populations that do not have a high socioeconomic status (quintile 4–5; the analysis is not presented here). The analysis shows that the trends over time, both per student and per class, are similar across all the quintiles, apart from in Hebrew State-religious education where there was an increase between 2014 and 2018 (although between 2016 and 2018 there was a decrease).

in particular in State-religious education). Between 2014 and 2018, classes in schools with students from strong socioeconomic backgrounds shrank in size, and increased in size in schools serving populations from weak socioeconomic backgrounds. As a result, the level of differential declined, as reflected in the figures for allocation per student in Hebrew State-religious education.

Conclusion

This study analyzes budgetary changes in primary school education, focusing on the issue of budget inequality between the various educational frameworks and within these frameworks. It also takes an in-depth look at whether the Ministry of Education policy to expand affirmative action by means of expenditure on populations with low socioeconomic status has been achieved.

An examination of the budgeting of the primary education system indicates that in the Official education system the average expenditure per class and per student is highest in the Druze and Bedouin sectors and that in the Hebrew State education system it is the lowest (see the graphs in Figure 1).²² The preferential budgeting enjoyed by the Bedouin and Druze education systems should be attributed primarily to their socioeconomic status and the affirmative action policy that is reflected in the allocation of the Nurture Basket, in the different class size for budgeting purposes, and in the prevalence of the long school day. However, when the budget is examined according to Nurture Index quintiles, it can be seen that, in the Official education system, the Hebrew State-religious schools are budgeted at the highest level both per class and per student, in almost all of the quintiles. The Recognized education system (apart from the two Haredi networks) is budgeted at a level that is tens of percent lower. This fact is explained by the desire on the part of the Ministry of Education to give preferential treatment to the public education system over the private.

The most substantial change between 2014 and 2018 occurred in the Recognized education system (not including the Independent education network and the Ma'ayan Hahinuch Hatorani network), whose budget per class and per student both grew by 23 percent, while the budget of the Official education system it shrank by 0.9 students. The explanation for this interesting development is worthy of a separate study. It can be hypothesized, though, that the changes in the government coalition following the elections of 2015,

22 We do not discuss the Official Haredi education system here since it is a very small group.

the agreements that the Ministry of Education signed with the Recognized schools following the strike of private Arab schools, and the dispute with the Hebrew Reali School in Haifa regarding the right to collect fees from parents were largely responsible for this outcome.

Apart from this particularly noticeable change, it is also worth mentioning that, in general, the growth in expenditure per class and per student was higher in schools serving weaker populations than in schools serving stronger ones.

Finally, the question arises as to how the Ministry of Education policy between 2014 and 2018 influenced the gaps in allocation per class and per student. The discussion of this issue is driven primarily by the large differences in budget size and in budgeting method between the three main parts of the primary education system: Official education, where 74 percent of students learn; Recognized education, with 13 percent of students; and the two large Haredi Network systems, with an additional 13 percent of students.

It appears, therefore, that inequality in budgeting between the three parts of the education system (Official, Recognized, and Network) has declined. In other words, there is now less preference given to the Official public education system, which is fully supervised, over the Recognized education system and the two Haredi networks, which are private and only partially supervised. In contrast, within each of the parts of the system budgeting inequality has risen. In other words, the affirmative action favoring students from weaker socioeconomic backgrounds that was in place at the beginning of the period has increased in scale.

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Appendix

The Theil Index of inequality

The index used in the analysis of inequality in this study is the Theil Index (Theil, 1967). The index takes positive values (or 0 in the case of full equality) and a higher value indicates greater inequality. The index is calculated as follows:

$$T = \frac{1}{n} \sum_{i=1}^n \frac{y_i}{\bar{y}} \ln \left(\frac{y_i}{\bar{y}} \right)$$

where:

n – number of schools.

y_i – expenditure on school i ($i=1\dots n$)

\bar{y} – average expenditure of all schools

One of the important properties of this index of inequality is that it can be decomposed. Thus, for example, the index makes it possible to decompose inequality into two components: (a) inequality **within** a group of schools (by sector, supervisory authority, and legal status), whose source is the variation in expenditure within groups; and (b) inequality **between** groups of schools, whose source is the variation in the average expenditure between groups. The following is the equation used for the calculation of the indices:

$$\begin{aligned} T &= \sum_{k=1}^m w_k \frac{\bar{y}_k}{\bar{y}} T_k + \sum_{k=1}^m w_k \frac{\bar{y}_k}{\bar{y}} \ln \left(\frac{\bar{y}_k}{\bar{y}} \right) = \\ &= \sum_{k=1}^m s_k T_k + \sum_{k=1}^m s_k \ln \left(\frac{s_k}{w_k} \right) = \\ &= T_{\text{within}} + T_{\text{between}} \end{aligned}$$

where:

T – Theil Index for all schools

w_k – the relative size of group k

\bar{y}_k – average expenditure of group k

T_k – Theil Index for group k

s_k – proportion of expenditure on group k out of total expenditure

T_{within} – inequality **within** the groups

T_{between} – inequality **between** groups

The left term in the equation, which is the within index, is the weighted sum of the inequality levels within a group of schools. The right term, which is the between index, focuses on gaps between the various groups. The basic assumption underlying the between index is that all the schools in a given group receive the average expenditure of the group. As a result, the ratio in the between term has special significance. When a particular group is budgeted at a higher rate than its share in the population (i.e., the ratio is greater than 1), its contribution to the index will be positive. When the ratio is less than 1, the contribution to the index will be negative²³ and if the ratio is equal to 1 then there is no inequality between the groups. Additionally, the fact that the between component of inequality is not negative, even though the contribution of certain groups can be negative, has another implication, namely that the groups for which the expenditure weight is higher than their proportion of the population generate a larger weight than the groups whose weight in expenditure is less than their share of the population.

Appendix Table 1. Ministry of Education budget for increasing the Nurture Basket and reducing number of students per class between 2015 and 2019

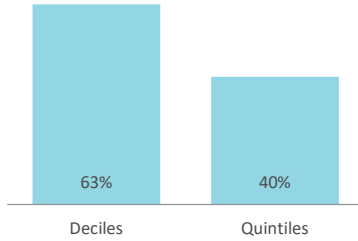
Year	Nurture Basket	Class size reduction
2015	125	55
2016	91	112
2017	90	100
2018	90	50
2019	70	50
Total	466	367

Note: The data are based on the sections relating to the main changes in transitions from one budget to the next, which appear in the Ministry of Education Budget Book for the relevant years. The two variables appeared for the first time in the Ministry of Education budget for the 2015 fiscal year. Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

23 When the ratio is between 0 and 1, the values of the logarithmic function will be negative. If the ratio increases within this range then its negative contribution will decline.

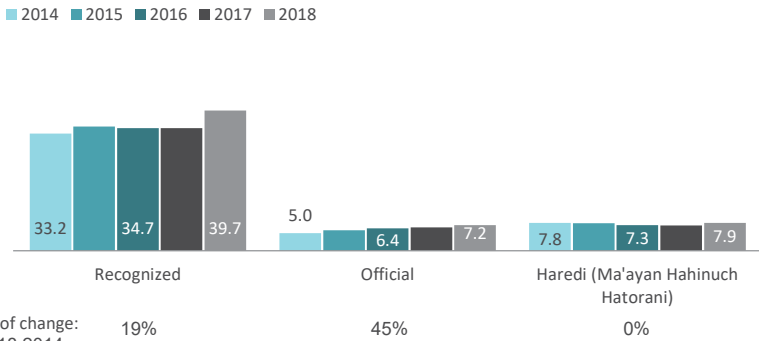
Appendix Figure 1. Schools experiencing a change in Nurture Index quintile and decile

As a percent of all schools in 2018

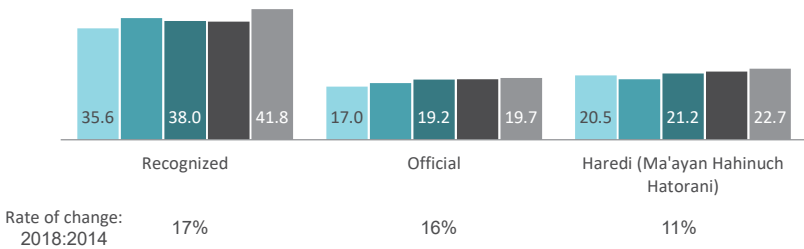


Appendix Figure 2. Inequality in expenditure

a. Per class expenditure



b. Per student expenditure



Note for Appendix Figure 2: In schools that did not experience a change in status (Nurture Index, legal status, etc.). Exempt schools are included with the Recognized schools for this work.

Appendix figures: Source: Nachum Blass and Haim Bleikh, Taub Center | Data: Ministry of Education

The structure of the Israeli education system

The Israeli education system serves students at every stage of their education, beginning in preschool through to higher education. It is impossible to examine any educational policy issue without a basic understanding of the structure of the system. The following lays out the main principles along which the system is divided:

1. Age

This division, termed “educational stage,” is the most well-known by the public, and is set by law under the Compulsory Education Law-1949 and various Knesset decisions for the reform of the education system. Students in the system are divided along the following lines:

- a. Preschool (from 2012, this includes children ages 3–4 in the Compulsory Education Law)
- b. Kindergarten (age 5)
- c. Primary school (Grades 1–6 — ages 6–11)
- d. Middle school (Grades 7–9 — ages 12–14)
- e. High school (Grades 10–12 — ages 15–17)
- f. Post-secondary and academic education (ages 18+)

These are the main educational stages. Aside from this division, there are a variety of frameworks at each stage. For example, there are preschools that have children ages 3–5 and there are those that divide the children by age; there are six year primary schools as well as those that extend to 8th grade; and at the high school level, there are some secondary schools that are four years.

2. Legal status

Education law in Israel recognizes three types of educational institutions that are distinguished by their level of state supervision: Official schools, Recognized but not official schools (henceforth: Recognized schools), and Exempt schools:

- a. Official schools are for the most part State Hebrew and Arab education as well as Hebrew State-religious schools, from preschool through middle school. In the past few years, a few Haredi Official schools have been established, but there are still very few of them.

- b. Almost all high schools are Recognized but not official schools. Other recognized schools include those schools in the Haredi Independent Networks, the Ma'ayan Hahinuch Hatorani Network schools, as well as other Recognized schools that are not necessarily religious. In this category, there is a distinction between the two Haredi Networks of schools, that are identified with Haredi political parties (the Haredi Independent Network is affiliated with Agudat Israel while Ma'ayan Hahinuch Hatorani is affiliated with the Shas political party), and other Recognized institutions. Haredi Network schools enjoy a special legal status codified in the Basic Budget Law of 1985, which affords them a school budget that is the same as Official schools.
- c. Exempt schools are Haredi and religious institutions that are exempt from Ministry of Education supervision under certain conditions, the main condition being that their educational curriculum includes at least 55 percent secular studies.

3. Sector

This division is principally one of national identity. The main division is Jewish and non-Jewish, while non-Jewish students are divided into three subgroups: Arab, Bedouin, and Druze. An additional subgroup is Circassian, although this is an exceptionally small group. There are those who classify all non-Jewish students as "Arab," although we prefer to use the distinction "Arabic-speakers." Israel's Central Bureau of Statistics chooses to avoid the national issue by dividing Israeli schools by language of instruction — Hebrew-speaking schools and Arabic-speaking schools. In this paper, whenever we are not referring to a specific Arabic-speaking subgroup, we refer to these schools as Hebrew and Arab schools and education systems. It is important to note that there are thousands of students classified as "Other," among them new immigrants or children of immigrants who are not halachically Jewish (i.e., their mother is not Jewish), the majority of whom study in the Hebrew State system.

4. Supervisory authority

This mainly distinguishes schools by religious orientation. There are three main groups:

- a. State schools, which include mainly institutions that are not classified as religious in both the Hebrew and Arab education system. The majority of primary and middle schools that are State schools are Official institutions,

although a portion of them, particularly in the Arab system, are Recognized schools. All high schools are Recognized schools.

- b. State-religious institutions and those with a National Religious orientation. Here, too, the majority of primary and middle schools are Official institutions, while all high schools are Recognized.
- c. Other schools are, for the main part, Haredi institutions.

There are two additional distinctions — socioeconomic level and ownership:

5. Socioeconomic status

The Ministry of Education ranks the student population by socioeconomic status. To this end, the Ministry created a “Nurture Index” that is based on four individual traits for each student. These four components and their respective weights are: the education level of the most educated between the two parents (40 percent), household per capita income (20 percent), school location (periphery — 20 percent), migrant students or those from countries in distress (20 percent). All students are ranked according to their score on this Index and divided into ten groups of the same size — Nurture deciles. Schools are also divided by their Nurture Index where the school’s Nurture Index is derived from the average Nurture Index of its student body. The school Nurture Index is the decile average of its student body. In the first decile are those schools with a student body of the highest socioeconomic status, while the tenth decile serves students of the lowest socioeconomic ranking, who are in need of additional resources. For convenience, in this work, we use a five-point scale — Nurture Index quintiles.

6. Ownership

This categorization is by school ownership.

- a. Schools owned by the State (Ministry of Education or Ministry of Labor, Social Affairs and Social Services).
- b. Schools owned by local authorities.
- c. Schools owned by educational Networks (Ma’ayan Hahinuch Hatorani, Haredi Independent Network, ORT, AMAL, AMIT, Horev, Noam-Tzviya, WIZO, Na’amat, and the like).
- d. Schools owned by a not-for-profit organization.
- e. Privately-owned schools.