

### **Information Note**

# Overall study hours and student well-being in Hong Kong

IN05/17-18

#### 1. Introduction

- 1.1 In Hong Kong, despite various education reforms implemented since the late 1990s, local education system remains highly examination-oriented. For students aged 6-18 in primary schools and secondary education, they usually need to take at least two school examinations and two school tests each year, on top of a number of class tests of a smaller scale. Coupled with the emphasis on academic achievement in parenting culture, local students tend to study hard for long hours, including time spent on homework and tutorial classes after school. There are concerns in the community that this hectic study schedule may crowd out some of the rest time of students on the one hand, and affect their health conditions and well-being on the other.
- 1.2 Reflecting the community concerns, the subject of study pressure and homework policy has been discussed at the Legislative Council on at least six occasions during 2015-2018. Most recently, a motion on the "Rights of children amid examination and schoolwork stress" was passed at the Subcommittee on Children's Rights on 25 November 2017. Moreover, five motions on the subject of "Homework policy" were passed at the Panel on Education on 5 January 2018.
- 1.3 At the request of Hon SHIU Ka-chun, the Research Office has completed a fact-finding study on the daily length of study hours in Hong Kong

Major education reforms implemented in Hong Kong since 1997 include (a) applying school-based curriculum and assessment; (b) using information technology in learning and teaching; (c) introducing new subjects and new curriculum; (d) using Putonghua as a teaching medium; (e) introducing a new academic structure "6-3-3-4" in 2009; and (f) providing free kindergarten education in 2017.

Students also need to attend territory-wide examinations held on a triennial basis, including the Basic Competency Assessment Research Study in Primary 3, Territory-wide System Assessment in Primary 6 and Secondary 3, and Hong Kong Diploma of Secondary Education Examination in Secondary 6.

The motion was moved by Hon SHIU Ka-chun, urging the Government to consider (a) setting maximum homework time; (b) requiring schools to assign same amount of homework on Fridays and other school days; and (c) requiring schools to arrange at least one long holiday homework-free so as to let students have the right to learn in a truly self-directed way.

The five motions were moved by five separate Members. They asked the Government to review the existing guidelines on homework and alleviate the study pressure of children.

and their welfare implications for local children, largely based on certain representative surveys conducted by academic institutions. <sup>5</sup> This information note begins with a quantification of time use of local students, followed by a discussion of its impact on well-being and health conditions of local children. For global comparison, it makes reference to the recent findings on study time and well-being of 15-year-old students under the Programme for International Student Assessment ("PISA") conducted by the Organisation of Economic Co-operation and Development ("OECD") in 2015. It concludes with recent research findings on time allocation for homework made by academics.

#### 2. Overall study time of local students

- 2.1 In 2016, there were altogether 349 000 primary school students and 339 800 secondary schools students in Hong Kong, accounting for about 9.3% of the local population. In a nutshell, study time of children comprises the following major components:
  - (a) **Normal schooling hours:** About 90% of local students in primary and secondary education attend government schools, aided schools or schools under the Direct Subsidy Scheme, mostly on the whole-day basis;
  - (b) Homework and revision after school: Homework is meant to enable students to consolidate and apply what they have learnt in schools. Based on a recent survey of the Education Bureau ("EDB"), daily homework time of primary school students varies widely, from less than 30 minutes to more than three hours, even for "similar homework arrangements for students of the same grade in the same school".<sup>7</sup>

In 2002, EDB had recommended in a guideline that "daily writing homework should not exceed 30 minutes" for lower primary

The request was made under a pilot scheme of a new initiative to strengthen research support to individual Members in the Sixth Legislative Council.

This note focuses on study time of students in primary and secondary education only. For the 184 000 kindergarten students, their schooling time ranges widely, from half-day basis to whole-day basis and long whole-day basis. Coupled with the fact that some of formal schooling involves certain childcare services, study time of kindergarten students merits a separate study.

EDB commissioned a homework survey in 2015-2016, covering about 7 000 parents from 100 primary schools, but details of this survey are not released to the public. See Education Bureau (2017).

school students, with similar time ceiling of "60 minutes" for upper primary school students. However, EDB removed these upper limits in the revised guidelines in 2015, on the ground that "since the modes of homework have become more diversified, it is difficult to set the maximum amount of homework for schools"; and

- (c) **Private tutorial lessons:** With a strong aspiration for academic advancement and amidst intense examination pressure, many local students attend private tutorial lessons for supplementary learning. According to the Census and Statistics Department ("C&SD"), about 36% of primary school students and 28% of lower secondary school students received private tutoring in 2004-2005. Although the tutoring coverage ratio is widely believed to have gone up noticeably over the past decade, more updated statistics are not available from C&SD. Some surveys suggest that such a ratio could have doubled to 50-75% in the more recent years.<sup>9</sup>
- 2.2 So far, the government has not conducted any comprehensive survey on time use (including study and rest time) of students by grade in Hong Kong. As such, the overall picture on study time can only be gauged through the following scattered surveys:<sup>10</sup>
  - (a) **Schooling time:** According to EDB, students in primary and secondary education generally spend about seven hours each day in schools, including lunch breaks and recesses;<sup>11</sup>

In October 2015, EDB issued a circular entitled "Guidelines on Homework and Tests in Schools - No Drilling, Effective Learning" to local schools, highlighting the need to avoid "inappropriate quantity of homework and excessive drilling", superseding the earlier guidelines issued in 2002. See Education Bureau (2002, 2014 and 2015) and GovHK (2015).

More recent surveys conducted by academic institutions suggest that the tutoring coverage ratio was more that 60% for students in Primary 4 in 2016, and 54% for Secondary 3 and 72% for Secondary 6 in 2011-2012. See Census and Statistics Department (2006), University of Hong Kong (2017a) and Zhan (2013).

Although many surveys have been conducted by local groups on the length of study time in Hong Kong in recent years, their sampling size is generally small and the survey methodology adopted may not be clearly provided. This paper would make reference to those studies conducted by academic institutions or those representative institutions with a relatively clearer research methodology.

<sup>11</sup> This normally includes two recesses of about 20 minutes each and a one-hour lunch break at school.

- (b) **Homework after school:** According to the survey findings of the Lingnan University in 2016, students in Primary 4-6 on average spent 2.4 hours each day on homework in 2015, while the respective figure was 1.9 hours for students in Secondary 1-3;<sup>12</sup>
- (c) **Private tutoring:** According to a survey conducted by the Hong Kong Federation of Youth Groups in 2012, the average amount of time spent on private tutoring by participating students in primary and secondary schools was about 4.9 hours per week or about 0.7 hour per day in 2012;<sup>13</sup> and
- (d) **Total daily study time:** As a crude aggregation, average study time for a student in primary to secondary education is estimated to be about 10 hours on a school day.
- 2.3 For the five-day school week alone, total study time could add up to about 50 hours on average. For the weekend, if the time spent on homework and private tutoring is broadly similar to school days, weekly study time for an average student in primary and secondary education could be around 55 hours per week. For those students in senior forms or taking more time in doing homework or attending tutorial classes during the weekend, the weekly study time could be even longer.

#### 3. Sleeping time of local students

3.1 Adequate sleeping time is important for children for development of brains as well as physical and mental strength. According to the medical guidelines on sleep duration of children made by the Centers for Disease Control and Prevention in the United States ("US") in 2017, the optimal daily sleeping time for paediatric population should be 10-13 hours for kindergarten students aged 3-5, 9-12 hours for primary school students aged 6-12, and 8-10 hours for secondary school students aged 13-18. However, there are

The survey was commissioned by Hong Kong Early Childhood Development Research Foundation, with participation of 1 146 students from 23 schools studying in Primary 4 to Secondary 3 in 2015. See Lingnan University (2016).

The survey was conducted in December 2012 and covered some 500 students from Primary 5 to Secondary 6. See Hong Kong Federation of Youth Groups (2013).

Centers for Disease Control and Prevention (2017).

meet concerns that local students cannot these sleeping recommendations in face of a tight study and activity schedule on the one hand, and increasing diversion of time to digital devices (e.g. Internet, social media and electronic games) on the other. 15

3.2 According to the aforementioned survey of the Lingnan University in 2016, average daily sleeping time was estimated to be 8.7 hours for students in Primary 4-6 and 7.3 hours for Secondary 1-3 in 2015. They are all below the recommendations made by the medical profession discussed above (Figure 1). As a matter of fact, another study conducted by the Chinese University of Hong Kong suggests that as many as 58% of local surveyed teenagers suffer from sleep deprivation. This in turn could have adverse effect on their physical health and mental health. 16

Hours per day 9-12 8-10 10 5 8.7 7.3 0 Primary 4-6 Secondary 1-3 Actual sleeping hours Recommendation on sleeping hours made by the medical profession

Figure 1 – Actual and recommended sleeping hours for children in Hong Kong

Sources: Centers for Disease Control and Prevention and Lingnan University.

Based on a survey of 7 600 primary school students in 2016, children aged 6-10 on average spent four hours each day on digital devices for playing videogames, watching television, communications

through social media, etc. See University of Hong Kong (2017b).

A survey of 4 500 teenagers conducted in 2013 shows that 58.4% of students did not have enough sleep, which in turn could lead to adverse effects such as mood and behavioural problems, academic deterioration, metabolic and cardiovascular abnormalities. See Chinese University of Hong Kong (2014).

#### 4. Well-being and mental health of local students

4.1 According to the aforementioned survey of the Lingnan University, self-reported well-being of local students in terms of Children Happiness Index has declined in recent years. Within a scale from 0 (least happy) to 10 (most happy), overall happiness index averaged at 6.49 for all surveyed children aged 8-18 in 2015, down by 6% compared with three years earlier. This decline in happiness was witnessed almost across-the-board, with particularly noticeable decreases seen amongst younger kids aged 8-9 and older adolescents aged 15-18 (**Figure 2**). The study identified "study pressures", "parental relationship" and "teachers and classmates" as key determinants of happiness of children. More recently, "adverse effect of academic pressures on family life and family happiness" became more significant in 2015, causing more parental concerns over "students' academic performance".

Figure 2 - Children Happiness Index\* in Hong Kong during 2012-2015

Age	2012	2015	% change
8-9 10 11 12 13 14 15-18	7.94 6.96 7.31 6.93 6.37 6.55 6.33	6.86 6.96 6.91 6.56 6.52 6.15 5.79	-14% 0% -5% -5% 2% -6% -9%
Overall	6.91	6.49	- <b>6%</b>

Note: (\*) Subjective feeling of happiness graded by students within a scale from 0 (least happy) to 10 (most happy).

Source: Lingnan University.

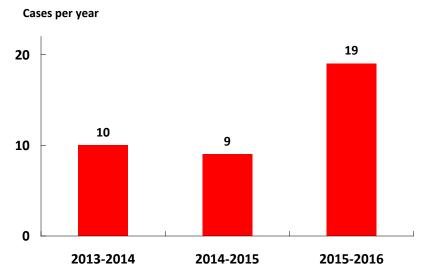
4.2 Academic pressure could also affect mental health of children. Based on a recent study published in 2016, "study-related stress" and "after-school activities" are identified as two strong predictors of childhood anxiety in Hong Kong, along with "family life" and "inter-personal relationship". 17 Moreover, according to the Mental Health Review Report published in 2017,

The study identified 12 daily hassles affecting the emotions of children. They included (a) poor academic performance; (b) too much homework; (c) concern about high school placement; (d) too many remedial classes; (e) too many interest classes; (f) too little free time; (g) conflicts with teachers; (h) conflicts with peers; (i) reprimand and punishment from parents; (j) negative mood of parents; (k) parents' quarrels; and (I) conflicts with siblings. See Chan et al. (2016).

some 16% of local students aged 13-15 displayed symptoms of mental disorders for the reference year of 2008, higher than the respective global ratio of 13%. In terms of the caseload handled by the child and adolescent psychiatric teams of Hospital Authority, it has also surged by 69% in five years to 32 000 in 2016-2017, warranting closer attention to mental health of local children.

4.3 More recently, there were concerns in the community over the 111% upsurge to a total of 19 cases of suicides committed by students aged 10-20 in primary and secondary education in the academic year of 2015-2016 (Figure 3). While youth suicide is a "complicated social problem" caused by a host of factors (e.g. household finance, family relationship, peer relationships, mental illness and psychological concerns), school-related stress usually plays an important part. According to a post-mortem study over the causes of all of the 38 suicide cases committed by primary and secondary school students during the three years till 2015-2016, 22 cases or 58% "showed adjustment issues related to schooling (e.g. recent transfer to a new school, grade retention, and poor school attendance)". 19

Figure 3 – Number of suicides committed by primary and secondary school students in recent academic years\*



Note: (\*) 12-month period from September to August of the next calendar year. Source: Committee on Prevention of Student Suicides.

\_

Mental disorders cover anxiety disorders, depressive disorders, attention deficit and hyperactivity. See Food and Health Bureau (2017).

<sup>&</sup>lt;sup>19</sup> Committee on Prevention of Student Suicides (2016).

#### 5. Global comparison on study hours and student well-being

- 5.1 There are very limited comparative global studies on study time and student well-being, partly due to technical challenges in conducting a large-scale survey and comparing like-with-like in different places. In the absence of more relevant information, findings of PISA 2015 participated by 15-year-old students across the globe and conducted by OECD are cited in this section for broad-brush comparison. <sup>20</sup> In this triennial PISA test, a total of 540 000 students from 72 places are required to attend a two-hour test on three major areas (i.e. reading literacy, mathematics and science), along with a 35-minute background questionnaire with more than 55 questions on a host of socio-economic variables for correlation analysis, such as the amount of time in formal classes in school (excluding lunch breaks and rest breaks) and study time after school (including homework and private tutorial lessons).
- About 5 000 students aged 15 from 138 secondary schools in Hong Kong were randomly selected for taking part in the PISA tests in 2015. On **academic performance**, the total score in the three subject areas of local students averaged at 1 598 in PISA 2015, 8% above the average score of 1 476 for all the 35 member states of OECD (**Figure 4**). In the league table of 71 places with available score statistics, Hong Kong was ranked the second, next to Singapore only. It was also above other selected places in East Asia which were also amongst the top 10 in the league table, including Japan (third), Macao (fourth), Taiwan (sixth), South Korea (ninth) and Beijing-Shanghai-Jiangsu-Guangdong (tenth). The full results of PISA 2015 ranked in descending order based on academic scores are also appended for ease of reference (**Appendix**).

-

PISA is widely adopted as benchmark comparative study on education systems across the globe. For key results of PISA 2015, see Organisation for Economic Co-operation and Development (2016a).

<sup>&</sup>lt;sup>21</sup> Chinese University of Hong Kong (2016b).

Analyzed by subject area, Hong Kong was ranked 9<sup>th</sup> in science in PISA 2015, down from the 2<sup>nd</sup> position in 2012. While its ranking in mathematics rose from 3<sup>rd</sup> to 2<sup>nd</sup>, it kept the 2<sup>nd</sup> position in reading in both years.

Figure 4 – PISA 2015 results in selected places (1)

	Total score in PISA tests	Total weekly study hours <sup>(2)</sup>	Within which: Schooling hours	After- school <u>study</u>	Life satisfaction <sup>(3)</sup>
<u>OECD</u>					
Finland	1 568	36.1	24.2	11.9	7.89
Germany	1 524	36.5	25.5	11.0	7.35
Netherlands	1 524	41.0	26.8	14.2	7.83
United Kingdom	1 500	43.4	26.5	17.0	6.98
France	1 487	42.6	27.2	15.4	7.63
OECD (average) <sup>(4)</sup>	1 476	44.0	26.9	17.1	7.31
East Asia					
Singapore	1 655	50.8	28.6	22.2	-
Hong Kong	1 598	46.4	28.8	17.7	6.48
Japan	1 587	41.1	27.5	13.6	6.80
Taiwan	1 572	48.2	31.8	16.4	6.59
South Korea	1 557	50.5	30.3	20.2	6.36
Beijing-Shanghai- Jiangsu-Guangdong	1 543	57.1	30.1	27.0	6.83

Notes: (1) Selected places are ranked in descending order, based on total scores in three tests in PISA 2015.

Source: Organisation for Economic Co-operation and Development.

5.3 On **weekly study time**, participating students were required to report their overall study time. Hong Kong students self-reported that they studied on average 46.4 hours each week in 2015, comprising 28.8 hours of formal class in schools and 17.7 hours after school. Apparently, this was lower than that of 55 hours per week crudely assessed in paragraph 2.3 above, mainly attributable to the exclusion of 8-9 hours of lunch breaks and recesses per week from the schooling time in the PISA study. The following comparative findings are noted:

-

<sup>(2)</sup> Including study hours in formal classes (but not lunch breaks and rest breaks) and after-school study (including homework, additional instruction and private study) per week.

<sup>(3)</sup> Self-grading of life satisfaction by students within a scale from 0 (not at all satisfied) to 10 (completely satisfied).

<sup>(4)</sup> Average figure for 35 member states of OECD.

<sup>(-)</sup> Data not available.

The exact wording of self-reported question on after-school study is "This school year, approximately how many hours per week do you spend learning in addition to your required school schedule?". For the latter, it specifies that "Please include the total hours for homework, additional instruction and private study".

- (a) **OECD:** The number of weekly study hours in Hong Kong is higher than OECD as whole (44.0 hours) and some of its member states like the United Kingdom (43.4 hours), France (42.6 hours), the Netherlands (41.0 hours), Germany (36.5 hours), and Finland (36.1 hours);
- (b) **East Asia:** Yet the weekly study time in Hong Kong is somewhat lower than other places in East Asia, such as Beijing-Shanghai-Jiangsu-Guangdong (57.1 hours), Singapore (50.8 hours), South Korea (50.5 hours) and Taiwan (48.2 hours). All these places are amongst the top 10 places in terms of academic scores in the three PISA subjects, suggesting a certain degree of positive relationship between study time and academic results; and
- (c) **Ranking:** Ranking the 58 places with available statistics on the length of study time in descending order, Hong Kong took the 23<sup>rd</sup> position. While the United Arab Emirates has the longest weekly study hours (58.5 hours), Finland has the shortest (36.1 hours).
- 5.4 On student well-being, participating teenagers in PISA 2015 were asked to grade their life satisfaction in an ascending scale from 0 (least satisfied) to 10 (most satisfied).<sup>24</sup> The following findings are noteworthy. *First*, the average score of Hong Kong students in life satisfaction was 6.5, 11% below the average figure of 7.3 for OECD. The contrast in self-perception of well-being becomes even starker when compared with those happier member states of OECD like the Netherlands (7.8) and Finland (7.9). **Secondly**, amongst the 50 places with available statistics on self-reported life satisfaction, Hong Kong was close to the bottom of the league (48<sup>th</sup>), just higher than Turkey and South Korea. Thirdly, life satisfaction in many selected places in East Asia is also on the low side, including Beijing-Shanghai-Jiangsu-Guangdong (6.8), Taiwan (6.6) and South Korea (6.4). 25 While these findings tend to suggest that the duration of study time might bear a negative correlation with life satisfaction, OECD notes that there are other factors affecting student well-being, including "teachers, parents and schools". 26

The exact wording of this self-reported question is "Overall, how satisfied are you with your life as a whole these days?"

Such figure was not available from Singapore.

According to OECD, "these are self-reports rather than external observations and [the grading of life satisfaction] may be influenced by cultural differences in how individuals respond." See Organisation for Economic Co-operation and Development (2013 and 2017a).

#### 6. Recent research on time allocation for homework

- The amount of homework is a contentious education issue in many places of the world. In recent academic research, while there is a general recognition of the positive implications of homework for learning and personal development<sup>27</sup>, there are concerns over negative consequences arising from prolonged exposure to homework.<sup>28</sup> By and large, recent discussion on the subject focuses on two empirical issues which may also be relevant to Hong Kong: (a) whether increasing time spent on homework could improve academic achievement of students by age and by grade; and (b) optimal amount of time allocated to homework after school.
- In a seminal research paper entitled "Does homework improve academic achievement? A synthesis of research 1987-2003" published in 2006, scholars led by Harris Cooper had summarized research findings on homework conducted by various academics over the past two decades. <sup>29</sup> Here are some of the empirical findings:
  - (a) Positive effect of homework on academic performance: After reviewing 69 empirical studies, Cooper concluded that there was a "positive and statistically significant" relationship between homework and achievement outcomes. For instance, he noted that 50 correlations between homework and achievement were in a positive direction in the past studies, while only 19 were in negative direction;
  - (b) Positive outcome of homework more visible for senior students than junior students: However, the positive effect of homework on academic outcomes was more apparent amongst students in senior forms only. As an illustration, high school students in the US (similar to Secondary 4-6 in Hong Kong) with homework could outperform 69% of students without homework. Yet such effect

Generally speaking, homework enables students to digest and absorb what they have learnt in schools. Moreover, not only does homework nurture the learning attitude and skills of children during the leisure time, it also promotes "self-direction and self-discipline" in their personality development. See Cooper et al. (2006).

On the other hand, critics of homework are concerned that children who were "over-exposed to academic tasks" could have negative impacts on their attitude towards schools. Excessive homework also leads to physical and emotional fatigue of students on the one hand, and denies students' access to leisure time and community activities on the other. For details, see Cooper et al. (2006).

<sup>&</sup>lt;sup>29</sup> Cooper et al. (2006).

was only "half this magnitude" for junior high school students (i.e. Secondary 1-3 in Hong Kong). For students in elementary schools (i.e. Primary 1-6 in Hong Kong), "homework had no association with achievement gains", partly attributable to cognitive psychology. As younger children are generally less able to filter out irrelevant stimulus or distractions at home, it makes their homework less effective than older students; and

- (c) Diminishing returns of study time in lower grades: Cooper also noted that the positive relationship between homework and academic performance for older students in high schools could sustain for a prolonged duration of more than two hours per night. However, for younger students in junior high schools, the positive relationship could disappear "entirely" as soon as after studying 1-2 hours each night. For the youngest students in elementary schools, there is limited research on the study time at home and its effectiveness.
- 6.3 In the light of the above findings, education experts tend to agree that homework should be kept at the modest level for younger children, but it can increase by grade. Harris Cooper has thus recommended a "10-minute rule" for optimal time allocation on homework, suggesting that the daily time spent on homework should increase by 10 minutes per grade. Applying this rule in the context of Hong Kong, local students in Primary 1 could spend about 10-20 minutes on homework each night, and homework time could increase to 60 minutes for Primary 6, 90 minutes for Secondary 3 and 120 minutes for Secondary 6. The philosophy of "10-minute rule" was shared by the National Education Association and National Parent-Teacher Association in the US. 31

Cooper (2016).

National Education Association (2018).

On homework policy, there are very few places with nationwide guidelines on quantitative targets nowadays. <sup>32</sup> However, some local governments in North America still have such guidelines, taking into account recent research findings on the subject. Taking Toronto city in Canada as an example, the Toronto District School Board has quantified the maximum time for homework in its guideline since 1999, balancing "the time required to complete homework with extra-curricular activities and other activities that support personal and family wellness". Under its revised homework policy effective since April 2008, the daily amount of time spent on homework should be (a) one hour or less for students in Grade 7-8 (i.e. Secondary 1-2 in Hong Kong); and (b) two hours or less for Grade 9-12 (i.e. Secondary 3-6). <sup>33</sup> Moreover, homework should not be assigned on "scheduled holidays as outlined in the school year calendar or on days of significance".

#### 7. Concluding remarks

- 7.1 Pooling relevant surveys together, total study time for local students in all grades of primary to secondary education (comprising schooling hours, after-school homework and private tutorial classes) is crudely assessed to average at about 55 hours per week. For those students in senior forms or those students studying harder and attending more tutorial lessons during the weekend, the respective study hours could be longer.
- 7.2 Daily sleeping time of local children was estimated to be 8.7 hours for students in Primary 4-6 and 7.3 hours for Secondary 1-3 in 2015, both are below the recommendations made by the medical profession. Survey findings suggest that some 58% of local teenagers suffered from sleep deprivation, which could have adverse implications for their health conditions.

The government of the United Kingdom ("the UK") led by the Labour Party during 1998-2012 once had a policy on homework time. Put it simply, it recommended that daily time spent on homework should increase with grade, from about 10 minutes for Grade 1-2 to 30 minutes for Grade 5-6, and further to 60-120 minutes for Grade 9. However, the following coalition government led by the Conservative Party decided to abolish the nationwide guideline on homework in 2012, leaving the head teachers of schools to decide the amount of homework most suitable to their students instead. See UK Government (1998) and Sellgren (2013).

<sup>&</sup>lt;sup>33</sup> Toronto District School Board (2008).

- 7.3 Self-reported well-being of local students has witnessed a noticeable decline across all major age groups in recent years, especially for children aged 8-9 (mostly in Primary 3-4) and aged 15-18 (mostly in Secondary 4-6). As a matter of fact, self-reported life satisfaction of students aged 15 in Hong Kong was only 6.5 in the PISA 2015 study, 11% below the average figure of OECD.
- Academic research shows that the positive relationship between homework and academic outcome is more apparent amongst older students only. Education specialists tend to suggest that the amount of homework should be modest at a young age and it could increase with grade. This in particular includes a "10 minute rule", suggesting that the daily time spent on homework by students could increase from 10-20 minutes for Primary 1 to 60 minutes for Primary 6, and further to 120 minutes for Secondary 6.

Prepared by Kari CHU Research Office Information Services Division Legislative Council Secretariat 30 January 2018

Tel: 2871 2125

Information notes are compiled for Members and Committees of the Legislative Council. They are not legal or other professional advice and shall not be relied on as such. Information Notes are subject to copyright owned by The Legislative Council Commission (The Commission). The Commission permits accurate reproduction of information Notes for non-commercial use in a manner not adversely affecting the Legislative Council, provided that acknowledgement is made stating the Research Office of the Legislative Council Secretariat as the source and one copy of the reproduction is sent to the Legislative Council Library. The paper number of this issue of Information Note is IN05/17-18.

## Major findings of PISA study for the 71 places (1) in 2015

Ranking <sup>(2)</sup>	Places	Total scores in the PISA 2015 tests <sup>(3)</sup>	Total weekly study hours <sup>(4)</sup>	Life Satisfaction <sup>(5)</sup>
1	Singapore	1 655	50.8	-
2	Hong Kong	1 598	46.4	6.5
3	Japan	1 587	41.1	6.8
4	Macao	1 581	44.5	6.6
5	Estonia	1 573	42.8	7.5
6	Taiwan	1 572	48.2	6.6
7	Canada	1 570	45.2	-
8	Finland	1 568	36.1	7.9
9	South Korea	1 557	50.5	6.4
10	Beijing-Shanghai- Jiangsu-Guangdong	1 543	57.1	6.8
11	Slovenia	1 528	44.5	7.2
12	Ireland	1 527	44.2	7.3
13	Germany	1 524	36.5	7.4
14	Netherlands	1 524	41.0	7.8
15	Switzerland	1 519	38.4	7.7
16	New Zealand	1 518	41.9	-
17	Norway	1 513	43.0	-
18	Denmark	1 513	46.0	-
19	Poland	1 512	46.4	7.2
20	Belgium	1 508	43.1	7.5
21	Australia	1 507	42.6	-
22	Viet Nam	1 506	-	-
23	United Kingdom	1 500	43.4	7.0
24	Portugal	1 491	45.4	7.4
25	Sweden	1 487	39.6	-
26	France	1 487	42.6	7.6
27	Austria	1 477	44.8	7.5
28	OECD average	1 476	44.0	7.3
29	Russia	1 475	48.5	7.8
30	Spain	1 474	46.5	7.4
31	Czech Republic	1 472	41.3	7.1
32	United States	1 463	48.1	7.4
33	Latvia	1 460	43.3	7.4
34	Italy	1 455	49.8	6.9
35	Luxembourg	1 450	42.2	7.4

Notes: (1) Amongst the 72 places included in the PISA study, Kazakhstan and Malaysia do not have comparable figures due to small sample coverage, while overall average for 35 member states of OECD is included in this table for benchmark comparison.

- (2) Ranking in descending order in accordance with total scores in PISA 2015.
- (3) Total scores in reading literacy, mathematics and science.
- (4) Study hours include both formal classes in school and after-school study.
- (5) Self-reported life satisfaction from 0 (least satisfied) to 10 (most satisfied).
- (-) Data not available.

Source: Organisation for Economic Co-operation and Development.

## Major findings of PISA study for the 71 places (1) in 2015

Ranking <sup>(2)</sup>	Places	Total scores in PISA 2015 tests <sup>(3)</sup>	Total weekly study hours <sup>(4)</sup>	Life Satisfaction <sup>(5)</sup>
36	Iceland	1 443	41.3	7.8
37	Croatia	1 426	45.9	7.9
38	Lithuania	1 426	43.2	7.9
39	Hungary	1 423	43.9	7.2
40	Israel	1 415	45.5	-
41	CABA (Argentina)	1 407	-	-
42	Malta	1 390	-	-
43	Slovak Republic	1 389	42.9	7.5
44	Greece	1 375	48.4	6.9
45	Chile	1 328	50.1	7.4
46	Bulgaria	1 319	43.6	7.4
47	Cyprus	1 313	46.0	7.1
48	Romania	1 312	-	-
49	United Arab Emirates	1 298	58.5	7.3
50	Uruguay	1 290	39.5	7.7
51	Turkey	1 274	50.4	6.1
52	Trinidad and Tobago	1 269	-	-
53	Moldova	1 264	-	-
54	Montenegro	1 256	50.2	7.8
55	Costa Rica	1 247	49.5	8.2
56	Mexico	1 247	47.9	8.3
57	Thailand	1 246	55.3	7.7
58	Albania	1 246	-	-
59	Colombia	1 230	46.3	7.9
60	Qatar	1 222	54.4	7.4
61	Georgia	1 216	-	-
62	Jordan	1 197	-	-
63	Indonesia	1 186	-	-
64	Brazil	1 185	46.7	7.6
65	Peru	1 181	50.1	7.5
66	Lebanon	1 129	-	-
67	Tunisia	1 114	55.7	6.9
68	FYROM	1 107	-	-
69	Kosovo	1 087	-	-
70	Algeria	1 085	-	-
71	Dominican Republic	1 017	50.1	8.5

Notes: (1) Amongst the 72 places included in the PISA study, Kazakhstan and Malaysia do not have comparable figures due to small sample coverage, while overall average for 35 member states of OECD is included in this table for benchmark comparison.

- (2) Ranking in descending order in accordance with total scores in PISA 2015.
- (3) Total scores in reading literacy, mathematics and science.
- (4) Study hours include both formal classes in school and after-school study.
- (5) Self-reported life satisfaction from 0 (least satisfied) to 10 (most satisfied).
- (-) Data not available.

Source: Organisation for Economic Co-operation and Development.

#### References

- 1. Census and Statistics Department. (2006) *Powerpoint on Latest 2004/05-based Consumer Price Indices*. Available from: http://www.censtatd.gov.hk/FileManager/EN/Content\_908/cpi\_slide.pdf [Accessed January 2018].
- 2. Census and Statistics Department. (2017) *Annual Digest of Statistics 2017.* Available from: http://www.statistics.gov.hk/pub/B10100032017AN17B0 100.pdf [Accessed January 2018].
- 3. Centers for Disease Control and Prevention. (2017) *How much sleep do I need?* Available from: https://www.cdc.gov/sleep/about\_sleep/how\_much\_sleep.html [Accessed January 2018].
- Chan et al (2016). Daily hassles, cognitive emotion regulation and anxiety in children. Vulnerable Children and Youth Studies, 11:3, 238-250. Available from: https://www.pathwayshrc.com.au/wp-content/uploads/2016/11/Thoughts-and-Anxiety-summary.pdf [Accessed January 2018].
- 5. Chinese University of Hong Kong. (2014) *Press release on "Healthy Sleep, Healthy School Life"*. Available from: http://www.cpr.cuhk.edu.hk/en/press\_detail.php?id=1771&t=cuhk-survey-reveals-majority-of-school-teens-have-insufficient-sleep-sleep-education-and-intervention-at-schools-help [Accessed January 2018].
- 6. Chinese University of Hong Kong. (2016a) *Press release on Survey Findings on Views on "Winning at the Starting Line" in Hong Kong.* Available from: http://www.cpr.cuhk.edu.hk/en/press\_detail.php?id=2317 [Accessed January 2018].
- 7. Chinese University of Hong Kong. (2016b) *Press release on Results of Programme for International Student Assessment 2015*. Available from: http://www.cpr.cuhk.edu.hk/en/press\_detail.php?id=2411 [Accessed January 2018].
- 8. Committee on Prevention of Student Suicides. (2016) *Final Report*. Available from: http://www.edb.gov.hk/attachment/en/student-parents/crisis-management/about-crisis-management/CPSS\_final\_report\_en.pdf [Accessed January 2018].

- 9. Cooper et al (2006). Does Homework Improve Academic Achievement? A Synthesis of Research, 1987–2003. *Review of Educational Research, Spring 2006*, Vol. 76, No. 1, pp. 1–62. Available from: https://larrycuban.files.wordpress.com/2011/06/review-of-educational-research-2006-cooper-1-62.pdf [Accessed January 2018].
- 10. Cooper H. (2016). *Homework is necessary part of learning.* Available from: https://www.nysasbo.org/uploadsfirstread/1473172253\_9-6-16%20-%20ATU%20-%20Homework%20is%20necessary.pdf [Accessed January 2018].
- 11. Education Bureau. (2002) Basic Education Curriculum Guide Building on Strengths (Primary 1 Secondary 3), Chapter 8 on Meaningful Homework. Available from: http://cd1.edb.hkedcity.net/cd/EN/Content\_2909/BE\_Eng.pdf [Accessed January 2018].
- 12. Education Bureau. (2014) Basic Education Curriculum Guide To Sustain, Deepen and Focus on Learning to Learn (Primary 1 6), Chapter 8 on Meaningful Homework. Available from: https://cd.edb.gov.hk/becg/englis h/chapter8.html [Accessed January 2018].
- 13. Education Bureau. (2015) Education Bureau Circular No. 18/2015: Guidelines on Homework and Tests in Schools No Drilling, Effective Learning. Available from: http://applications.edb.gov.hk/circular/upload/EDBC/EDBC15018E.pdf [Accessed January 2018].
- 14. Education Bureau. (2017) Whole-day Primary Schooling, Homework Policy and School-based After-school Learning and Support Programmes.

  Available from: https://www.legco.gov.hk/yr17-18/english/panels/ed/papers/ed20171201cb4-287-3-e.pdf [Accessed January 2018].
- 15. Food and Health Bureau. (2017) *Mental Health Review Report*. Available from: http://www.hpdo.gov.hk/doc/e\_mhr\_full\_report.pdf [Accessed January 2018].
- 16. GovHK. (2015) *LCQ9: Homework for primary school students*. Available from: http://www.info.gov.hk/gia/general/201511/18/P201511180857.ht m [Accessed January 2018].
- 17. GovHK. (2016) *LCQ12: Mental health problems of students.* Available from: http://www.info.gov.hk/gia/general/201605/25/P201605250619.ht m [Accessed January 2018].

- 18. GovHK. (2017) *LCQ3: Measures to prevent student suicides.* Available from: http://www.info.gov.hk/gia/general/201705/31/P201705 3100676.htm [Accessed January 2018].
- 19. Hong Kong Federation of Youth Groups. (2013) *Private Tutoring of Students in Hong Kong.* Available from: https://yrc.hkfyg.org.hk/wp-content/uploads/sites/56/2017/12/201303\_Private-Tutoring-of-Students-in-Hong-Kong.pdf [Accessed January 2018].
- 20. Legislative Council Secretariat. (2017) Submissions from deputations/individuals to Subcommittee on Children's Rights for the meeting on 25 November 2017. LC Paper No. CB(4)248/17-18(02) LC Paper No. CB(4)248/17-18(30).
- 21. Lingnan University. (2016) *Hong Kong Children Happiness Index 2015*. Available from: https://www.ln.edu.hk/f/upload/14898/Children\_Happine ss\_Index\_2015.pdf [Accessed January 2018].
- 22. National Education Association. (2018) *Research Spotlight on Homework.* Available from: http://www.nea.org/tools/16938.htm [Accessed January 2018].
- 23. National Foundation for Educational Research. (2001) *Homework: A Review of Recent Research*. Available from: https://www.nfer.ac.uk/publications/HWK01/HWK01.pdf [Accessed January 2018].
- 24. Organisation for Economic Co-operation and Development. (2013) *PISA* 2012 Results: What makes schools successful? Available from: https://www.oecd.org/pisa/keyfindings/pisa-2012-results-volume-IV.pdf [Accessed January 2018].
- 25. Organisation for Economic Co-operation and Development. (2014) *Does Homework Perpetuate Inequities in Education?* Available from: http://www.oecd-ilibrary.org/education/does-homework-perpetuate-inequities-in-education 5jxrhqhtx2xt-en [Accessed January 2018].
- 26. Organisation for Economic Co-operation and Development. (2016a) *PISA* 2015 Results in Focus. Available from: https://www.oecd.org/pisa/pisa-2015-results-in-focus.pdf [Accessed January 2018].

- 27. Organisation for Economic Co-operation and Development. (2016b) *PISA* 2015 Results (Volume II) Policies and Practices for Successful Schools. Available from: http://www.oecd.org/edu/pisa-2015-results-volume-ii-9789264267510-en.htm [Accessed January 2018].
- 28. Organisation for Economic Co-operation and Development. (2017a) *PISA* 2015 Results (Volume III) Students' Well-being. Available from: http://www.oecd-ilibrary.org/education/pisa-2015-results-volume-iii\_9789264273856-en;jsessionid=2a1p4norkxrhp.x-oecd-live-02 [Accessed January 2018].
- 29. Organisation for Economic Co-operation and Development. (2017b) *PISA in Focus #73, Do Students Spend Enough Time Learning*? Available from: https://www.theewf.org/uploads/pdf/Do-students-spend-enough-time-learning.pdf [Accessed January 2018].
- 30. Organisation for Economic Co-operation and Development. (2017c) *Education at a Glance 2017: OECD Indicators*. Available from: http://www.oecd-ilibrary.org/education/education-at-a-glance-2017\_eag-2017-en [Accessed January 2018].
- 31. Sellgren K. (2013) 'New term, new battle over homework'. *BBC News,* 24 September 2013. Available from: http://www.bbc.com/news/educatio n-24126000 [Accessed January 2018].
- 32. Toronto District School Board (2008). *Homework, Policy P036.* Available from: http://www2.tdsb.on.ca/ppf/uploads/files/live/97/199.pdf [Accessed January 2018].
- 33. UNICEF Hong Kong. (2014) *Press release on study pressure*. Available from: http://www.unicef.org.hk/en/home-news-media-press-release-donationshopvolunteerpress-release-survey-reveals-90-per-cent-students-suffer-study-pressure-unicef-hk-mav-helps-children-voice-celebration-cr/[Accessed January 2018].
- 34. United Kingdom Government. (1998) *Homework: guidelines for primary and secondary schools*. Available from: http://webarchive.nationalarchives.gov.uk/20110113133739/http://www.teachernet.gov.uk/docbank/index.cfm?id=12761 [Accessed January 2018].

- 35. University of Hong Kong. (2017a) *Press release on Progress in International Reading Literacy Study (PIRLS) 2016 International Report (Hong Kong Section)*. Available from: https://www.hku.hk/f/upload/17208/PIRLS2016 \_e.pdf [Accessed January 2018].
- 36. University of Hong Kong. (2017b) *Press release on Hong Kong Children Overuse Digital Devices and Have Inferior Physical Fitness*. Available from: https://www.hku.hk/press/press-releases/detail/16890.html [Accessed January 2018].
- 37. Zhan. (2013) The effectiveness of private tutoring: students' perceptions in comparison with mainstream schooling in Hong Kong. Available from: https://hub.hku.hk/bitstream/10722/184784/1/Content.pdf?accept=1 [Accessed January 2018].