

Survey on Senior Secondary Subject Information 2019/20 School Year

Main Findings

A. Background

1. The Education Bureau (EDB) conducted the “*Survey on Senior Secondary Subject Information: 2019/20 School Year*” from October to November 2019 which invited all government and aided secondary schools, caput schools, and secondary schools under the Direct Subsidy Scheme to submit the information on the senior secondary subjects offered at Secondary 4 (S4), Secondary 5 (S5) and Secondary 6 (S6), as well as subjects taken by senior secondary students in the 2019/20 school year.
2. This Survey collected both school level (subject-offer) and student level (subject-taking) data. The student level data on S6 was taken from the Hong Kong Diploma of Secondary Education (HKDSE) Examination registration information on the schools participating in this Survey, provided by the Hong Kong Examinations and Assessment Authority in December 2019, as a proxy for S6 student subject enrolment. The S6 figures for all years quoted in this document are HKDSE Examination registration figures, as mentioned, of the respective years.
3. Survey results over time have indicated that subject-offer and subject-taking patterns are becoming more stabilised. The EDB will continue to observe these patterns to optimise students’ learning experiences according to their abilities and interests, for example, through encouraging students to take three elective subjects (including Applied Learning and Other Languages) if ability permits, to participate in Other Learning Experiences to broaden their horizons, to explore and choose subjects and pathways that suit their interests and future development, so that they can build on their strengths and stretch their potential to achieve the aims of whole-person development and lifelong learning.

B. Main Findings¹

Schools continued to offer adequate elective subject choices for students

4. Schools on average offered about 11 elective subjects at each of S4, S5 and S6. The more popular² elective subjects include “Biology”, “Physics”, “Chemistry”, “Economics”, “Geography”, “Business, Accounting and Financial Studies”, “Information and Communication Technology”, “Chinese History” and “Visual Arts”. Relatively fewer² schools offered “Integrated Science”, “Combined Science”, “Technology and Living” and “Literature in English” (Table 1 of the Annex). Findings from the Survey suggest that the pattern of elective subjects offered by schools was similar to those of previous years. Regarding the offer of elective subjects, the EDB has all along been encouraging schools to utilise the Diversity Learning Grant to offer network programmes on senior secondary subjects in collaboration with other schools to increase subject choices for students to better meet their learning needs and interests.
5. Over 70% of secondary schools offered Applied Learning courses; about 9% of S5 students studied in a total of 36 Applied Learning courses³, and 8% of S6 students registered for a total of 33 Applied Learning courses under the HKDSE, reflecting the diverse interests and learning needs of students (Table 1 of the Annex).

Students’ choices of elective subjects remained diversified

6. About 98% of S4 students, 97% of S5 students and 91% of S6 students took two or three elective subjects (Table 2 of the Annex). Findings from the Survey suggest that the percentage of students taking three elective subjects has been stable in recent years.
7. Students’ choices of elective subjects were observed to be diversified and not limited to one Key Learning Area (KLA). About 68% of S4 students, 67% of S5 students and 60% of S6 students took elective subjects from two or more KLAs (Table 3 of the Annex).
8. There were over 1 000 elective subject combinations each for S4 and S5; and around 900 elective subject combinations for S6. There were on average 34 elective subject combinations in each school at S4, and 38 elective subject combinations at S5 and S6 respectively (including Applied Learning courses³)

¹ The Main Findings cover the senior secondary subject information from 445 ordinary schools.

² More popular elective subjects refer to subjects offered by over 70% of schools at each of the three class levels of S4, S5 and S6. Subjects offered by relatively fewer schools refer to subjects offered by less than 10% of schools at each of the three class levels of S4, S5 and S6.

³ Applied Learning Chinese (for non-Chinese speaking students) is not included.

(Table 4 of the Annex). The top 30 combinations of elective subjects taken by S4, S5 and S6 students are tabulated at Table 5 of the Annex for reference.

9. Relatively more⁴ students took “Biology”, “Chemistry”, “Economics”, “Physics”, “Business, Accounting and Financial Studies”, “Geography”, “Chinese History”, “Information and Communication Technology” and “History”. Relatively fewer⁴ students took “Integrated Science”, “Combined Science”, “Music”, “Technology and Living” and “Literature in English” (Table 1 of the Annex). In general, the pattern of student enrolment was similar in S4, S5 and S6.

Other observations

10. From the data collected in the Survey over time, the following observations on some subjects are made:

- (i) Mathematics

The percentage of students taking the Mathematics Extended Part (Module 1 or Module 2) has been stable in recent years. In each of the school years from 2017/18 to 2019/20, over 14% of S6 students took the Extended Part, which is about the same as the percentage of S7 students who took Mathematics in the old system (about 15% in the 2011/12 school year). As the Mathematics Extended Part is gaining higher recognition by local universities, and with the implementation of the optimising measures for the four senior secondary core subjects from the 2021/22 school year, the EDB will continue to provide support to schools in offering the Mathematics Extended Part, including enhancing the professional training for teachers.

- (ii) Science subjects

The percentages of schools offering Biology, Chemistry and Physics at S4 were respectively over 95% in the 2019/20 school year, reflecting that these three subjects were very popular among students. With the implementation of the optimising measures for the four senior secondary core subjects, space will be created for students to study an additional subject. The EDB will encourage schools to offer more subject groups of Biology, Chemistry and Physics, and provide other STEM⁵-related subjects and Applied Learning courses to meet students’ aspiration in science learning and help them build a solid science knowledge foundation, so as to equip them for pursuing further studies and careers in science or STEM-related disciplines in future.

⁴ Elective subjects taken by relatively more students refer to subjects taken by over 10% of students at each of the three class levels of S4, S5 and S6. Elective subjects taken by relatively fewer students refer to subjects taken by less than 1% of students at each of the three class levels of S4, S5 and S6.

⁵ Science, Technology, Engineering and Mathematics.

(iii) Chinese History

Around 90% of schools offered Chinese History at the senior secondary level every year. Among all elective subjects, Chinese History has always been one of the top ten elective subjects taken by S4 students. In the past few years, the percentage of S4 students taking Chinese History has been stable at around 14%. Starting from the 2018/19 school year, Chinese History has become an independent compulsory subject for all junior secondary students and “Reinforcing the learning of Chinese history and Chinese culture” is one of the major renewed emphases in the *Secondary Education Curriculum Guide*. The EDB has also strengthened a series of measures on teacher professional development programmes and teaching support to further optimise Chinese history education and encourage more students to study Chinese History at the senior secondary level. The revised junior secondary Chinese History curriculum has been implemented progressively starting from S1 in the 2020/21 school year and provides students with a holistic Chinese history education with equal emphasis on ancient and modern times. This will help enhance students' interest in studying Chinese history and increase their chances of taking Chinese History as their elective subject at the senior secondary level.

(iv) Tourism and Hospitality Studies

The percentage of schools offering Tourism and Hospitality Studies at S4 has increased steadily from 35% in the 2009/10 school year to around 45% in the 2019/20 school year, reflecting that Tourism and Hospitality Studies has gradually received recognition from students, parents and schools. The tourism industry is closely linked to the economy of Hong Kong. Tourism and Hospitality Studies will help students explore their future studies and career aspirations. The EDB will continue to encourage schools to offer different elective subjects to provide opportunities for students to develop their personal interests and explore future life pathways through a diversified curriculum.

(v) Physical Education

In the last 10 years, schools offering Physical Education as a senior secondary elective subject (Physical Education Elective) has increased notably from 14% in the 2009/10 school year to around 25% in the 2019/20 school year, indicating that increasingly more schools and students are recognising the value of the Physical Education Elective in providing students with the opportunity to develop their capabilities and unleash their potential. To further promote the subject, the EDB has set up a “Senior Secondary Physical Education Elective Learning Circle” to provide a range of supports to schools, such as organising professional development programmes, and working with teachers to produce different kinds of learning and teaching resources. All these aim to

deepen teachers and students' understanding of the Physical Education Elective.

(vi) Applied Learning

The percentage of schools offering Applied Learning at S5 increased continuously from 63% in the 2010/11 school year to about 77% in the 2019/20 school year. It shows that the curriculum rationale of Applied Learning is becoming more well-received and its value has been increasingly recognised by schools. Applied Learning places dual emphasis on theory and practice which complements other senior secondary subjects from flexible subject combinations for providing students with holistic learning experiences. The EDB will continue to promote Applied Learning as a valued senior secondary elective subject through providing different support measures to create favourable conditions for schools to further promote Applied Learning.

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2019/20 School Year Survey Results**Table 1: Number and percentage of (a) schools' offering; and (b) students' taking of senior secondary subjects in 2019/20**

Senior secondary subject	S4				S5				S6			
	Schools offered		Students enrolled		Schools offered		Students enrolled		Schools offered		Students registered HKDSE ¹	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Chinese Language ²	444	99.8	47,051	96.9	443	99.6	44,377	97.2	442	99.3	43,767	97.1
English Language	445	100.0	48,555	100.0	445	100.0	45,673	100.0	445	100.0	44,963	99.8
Liberal Studies	445	100.0	48,526	99.9	445	100.0	45,673	100.0	445	100.0	44,926	99.7
Mathematics	445	100.0	48,555	100.0	445	100.0	45,673	100.0	445	100.0	44,969	99.8
Compulsory Part only	116	26.1	39,833	82.0	45	10.1	37,360	81.8	49	11.0	38,276	84.9
Compulsory Part + Module 1	162	36.4	2,921	6.0	216	48.5	3,053	6.7	212	47.6	2,310	5.1
Compulsory Part + Module 2	261	58.7	5,605	11.5	314	70.6	5,260	11.5	309	69.4	4,383	9.7
Compulsory Part + not-yet-specified Extended Part	6	1.3	196	0.4	0	0.0	0	0.0	--	--	--	--
Chinese Literature	125	28.1	1,587	3.3	132	29.7	1,416	3.1	129	29.0	1,306	2.9
Literature in English	31	7.0	462	1.0	29	6.5	306	0.7	25	5.6	251	0.6
Chinese History	397	89.2	7,155	14.7	400	89.9	6,232	13.6	392	88.1	5,539	12.3
Economics	415	93.3	13,828	28.5	418	93.9	12,643	27.7	417	93.7	11,699	26.0
Ethics and Religious Studies	82	18.4	1,192	2.5	80	18.0	792	1.7	76	17.1	729	1.6
Geography	411	92.4	9,824	20.2	407	91.5	8,805	19.3	408	91.7	8,357	18.5
History	306	68.8	5,988	12.3	304	68.3	5,387	11.8	299	67.2	4,803	10.7
Tourism and Hospitality Studies	198	44.5	4,038	8.3	195	43.8	3,543	7.8	196	44.0	3,378	7.5
Biology	433	97.3	15,192	31.3	431	96.9	13,355	29.2	430	96.6	12,490	27.7
Chemistry	424	95.3	14,656	30.2	420	94.4	13,082	28.6	423	95.1	11,805	26.2
Physics	424	95.3	12,049	24.8	429	96.4	10,469	22.9	424	95.3	9,751	21.6
Science: Combined Science	24	5.4	323	0.7	31	7.0	328	0.7	39	8.8	437	1.0
Biology + Chemistry	16	3.6	173	0.4	21	4.7	184	0.4	27	6.1	206	0.5
Chemistry + Physics	10	2.2	116	0.2	12	2.7	109	0.2	19	4.3	205	0.5
Physics + Biology	2	0.4	34	0.1	4	0.9	35	0.1	4	0.9	26	0.1
Science: Integrated Science	7	1.6	100	0.2	8	1.8	100	0.2	9	2.0	92	0.2
Business, Accounting and Financial Studies	406	91.2	11,570	23.8	404	90.8	10,172	22.3	405	91.0	9,372	20.8
Design and Applied Technology	46	10.3	697	1.4	50	11.2	634	1.4	54	12.1	521	1.2
Health Management and Social Care	47	10.6	935	1.9	46	10.3	816	1.8	46	10.3	712	1.6
Information and Communication Technology	405	91.0	6,870	14.1	405	91.0	6,013	13.2	400	89.9	5,360	11.9
Technology and Living	20	4.5	254	0.5	22	4.9	242	0.5	19	4.3	188	0.4
Food Science & Technology	15	3.4	209	0.4	16	3.6	194	0.4	14	3.1	156	0.3
Fashion, Clothing & Textiles	5	1.1	45	0.1	6	1.3	48	0.1	5	1.1	32	0.1
Music	79	17.8	224	0.5	63	14.2	167	0.4	79	17.8	177	0.4
Visual Arts	362	81.3	4,579	9.4	356	80.0	3,787	8.3	360	80.9	3,249	7.2
Physical Education	112	25.2	1,292	2.7	107	24.0	1,147	2.5	103	23.1	1,022	2.3
Applied Learning (no. of students) ³	--	--	--	--	341	76.6	4,063	8.9	330	74.2	3,443	7.6
Applied Learning (no. of enrolments) ³	--	--	--	--	341	76.6	4,147	--	330	74.2	3,513	--

Notes

1: S6 student data was not collected from schools direct in this Survey but extracted from the Hong Kong Diploma of Secondary Education (HKDSE) Examination registration data provided by the Hong Kong Examinations and Assessment Authority (data extracted only for schools included in this Survey).

- 2: Information on other Chinese language curricula (e.g. adapted Chinese Language curriculum for non-Chinese speaking students) is not included. Note that one participating school did not offer the local Chinese Language curriculum (leading to the HKDSE Examination) for S4 students, two participating schools did not offer the local Chinese Language curriculum (leading to the HKDSE Examination) for S5 students, and three participating schools did not offer the local Chinese Language curriculum (leading to the HKDSE Examination) for S6 students in the 2019/20 school year.
- 3: Information as at 15 October 2019. There are 36 and 33 Applied Learning courses offered to S5 (2019–21 cohort) and S6 (2018–20 cohort) students respectively in the 2019/20 school year; Applied Learning Chinese (for non-Chinese speaking students) is not included.

Table 2: Number of elective subjects taken by senior secondary students in 2019/20

No. of elective subjects taken	S4 ⁴	S5	S6 (HKDSE registration data)
	% of students	% of students	% of students
< 2	0.93%	2.24%	8.30%
2	66.08%	68.16%	72.22%
3	31.63%	29.12%	19.23%
> 3	1.36%	0.48%	0.26%
Total	100%	100%	100%

Note 4: The EDB encourages schools to offer more SS elective subjects to S4 students to explore their interest, so as to decide on the subjects to be taken in S5 or S6.

Table 3: Cross-Key Learning Area (KLA) elective subject-taking by senior secondary students in 2019/20

No. of KLA(s)	S4	S5	S6 (HKDSE registration data)
	% of students	% of students	% of students
≤ 1	32.42%	33.07%	40.25%
2	60.24%	59.16%	55.01%
3	7.04%	7.69%	4.69%
> 3	0.30%	0.07%	0.06%
Total	100%	100%	100%

Table 4: Number of elective subject combinations in 2019/20

No. of elective subjects taken ⁵	S4		S5		S6 (HKDSE registration data)	
	Subject combination		Subject combination		Subject combination	
	No.	%	No.	%	No.	%
1	18	1.51%	22	2.14%	24	2.68%
2	203	17.07%	217	21.13%	226	25.28%
3	687	57.78%	660	64.26%	565	63.20%
> 3	281	23.63%	128	12.46%	79	8.84%
Total	1,189	100%	1,027	100%	894	100%
Average no. of elective subject combinations per school	34.49		38.33		37.93	

Note 5: All Applied Learning courses are grouped as a single subject in calculating the subject combination. Applied Learning Chinese (for non-Chinese speaking students) is not included.

Table 5: Top 30 elective subject combinations taken by senior secondary students in 2019/20

Order	S4			S5			S6 (HKDSE registration data)		
	Subject combination ⁶	Students enrolled		Subject combination ⁶	Students enrolled		Subject combination ⁶	Students enrolled	
		No.	%		No.	%		No.	%
1	BIO CHEM	2,667	5.49%	BIO CHEM	2,634	5.77%	BIO CHEM	2,897	6.43%
2	BAFS ECON	2,518	5.19%	BAFS ECON	2,608	5.71%	BAFS ECON	2,833	6.29%
3	CHEM PHY	2,303	4.74%	CHEM PHY	2,277	4.99%	CHEM PHY	2,396	5.32%
4	BIO CHEM PHY	2,282	4.70%	BIO CHEM PHY	1,818	3.98%	BIO CHEM PHY	1,546	3.43%
5	ICT PHY	1,085	2.23%	BIO CHEM ECON	990	2.17%	ECON GEOG	973	2.16%
6	BIO CHEM ECON	1,082	2.23%	ICT PHY	957	2.10%	ICT PHY	959	2.13%
7	CHI_HIST HIST	921	1.90%	CHI_HIST HIST	950	2.08%	BIO GEOG	955	2.12%
8	BIO GEOG	883	1.82%	ECON GEOG	848	1.86%	CHI_HIST HIST	912	2.02%
9	ECON GEOG	785	1.62%	BIO GEOG	819	1.79%	BIO ECON	818	1.82%
10	CHI_HIST GEOG	778	1.60%	CHI_HIST GEOG	696	1.52%	GEOG HIST	699	1.55%
11	GEOG THS	731	1.51%	BIO ECON	635	1.39%	CHI_HIST GEOG	680	1.51%
12	CHEM ECON PHY	688	1.42%	GEOG HIST	630	1.38%	BIO CHEM ECON	674	1.50%
13	GEOG HIST	644	1.33%	CHEM ECON PHY	584	1.28%	ECON PHY	667	1.48%
14	BAFS BIO	639	1.32%	ECON PHY	557	1.22%	CHI_HIST ECON	614	1.36%
15	BIO ECON	634	1.31%	BAFS ICT	556	1.22%	BAFS BIO	593	1.32%
16	BAFS ICT	621	1.28%	BAFS BIO	517	1.13%	BIO PHY	564	1.25%
17	BAFS THS	596	1.23%	BAFS GEOG	517	1.13%	BAFS GEOG	559	1.24%
18	BIO CHEM GEOG	534	1.10%	GEOG THS	508	1.11%	BAFS ICT	535	1.19%
19	CHI_HIST ECON	504	1.04%	CHI_HIST ECON	500	1.09%	GEOG THS	502	1.11%
20	BAFS GEOG	500	1.03%	BAFS THS	456	1.00%	BAFS PHY	499	1.11%
21	GEOG PHY	474	0.98%	BIO PHY	422	0.92%	ECON HIST	452	1.00%
22	BAFS BIO CHEM	473	0.97%	BIO CHEM GEOG	417	0.91%	ECON ICT	448	0.99%
23	ICT VA	466	0.96%	ECON ICT	406	0.89%	CHEM ECON	441	0.98%
24	ECON PHY	464	0.96%	GEOG PHY	389	0.85%	CHEM ECON PHY	439	0.97%
25	ECON ICT	461	0.95%	BAFS BIO CHEM	388	0.85%	CHI_HIST CHI_LIT	421	0.93%
26	BAFS PHY	438	0.90%	ECON HIST	385	0.84%	BAFS THS	417	0.93%
27	BAFS CHI_HIST	437	0.90%	BAFS CHI_HIST	383	0.84%	GEOG PHY	396	0.88%
28	CHEM ICT PHY	436	0.90%	BAFS PHY	376	0.82%	ICT	360	0.80%
29	BIO ICT	424	0.87%	CHI_HIST CHI_LIT	350	0.77%	BAFS CHI_HIST	348	0.77%
30	BAFS VA	403	0.83%	BIO ICT	349	0.76%	ECON	338	0.75%
	TOTAL:	25,871	53.28%	TOTAL:	23,922	52.38%	TOTAL:	24,935	55.33%

Note 6: All Applied Learning courses are grouped as a single subject in calculating the subject combination. Applied Learning Chinese (for non-Chinese speaking students) is not included.

Remarks:

BAFS - Business, Accounting and Financial Studies
 BIO - Biology
 CHEM - Chemistry
 CHI_HIST - Chinese History
 CHI_LIT - Chinese Literature
 ECON - Economics

GEOG - Geography
 HIST - History
 ICT - Information and Communication Technology
 PHY - Physics
 THS - Tourism and Hospitality Studies
 VA - Visual Arts