

Survey on Senior Secondary Subject Information 2020/21 School Year

Main Findings

A. Background

1. The Education Bureau (EDB) conducted the “*Survey on Senior Secondary Subject Information: 2020/21 School Year*” from November to December 2020 and invited all government and aided secondary schools, caput schools, and secondary schools under the Direct Subsidy Scheme offering the local senior secondary curriculum 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 S4 and S5 students in the 2020/21 school year¹.
2. This Survey collected both school level (schools’ subject-offer) and student level (students’ subject-taking) data. The student level data on S4 and S5 was submitted by schools whereas data on S6 was extracted from the Hong Kong Diploma of Secondary Education (HKDSE) Examination registration information on the schools participating in this Survey as a proxy for S6 student subject enrolment. The S6 student figures quoted in this document are HKDSE Examination registration figures.
3. Information collected from this Survey is useful to the EDB and other stakeholders in the implementation of the senior secondary curriculum and assessment. For example, optimising measures on the four senior secondary core subjects have been implemented starting at S4 in September 2021 where students are encouraged to utilise the space released to broaden their learning experiences through, for example, taking an additional elective subject (including Applied Learning) or the Extended Part of Mathematics. The Survey for the 2021/22 school year, which is now in progress, can help provide important information for us to understand the impact of the optimisation on schools and students. Initial results are expected by the second half of 2022.

¹ The optimising measures on the four senior secondary core subjects have been implemented starting at S4 in September 2021. This Survey (2020/21 school year) was conducted before the implementation of the optimising measures.

B. Main Findings²

Schools continued to offer adequate and diversified elective subject choices for students

4. Schools on average offered about 11 elective subjects at each of S4, S5 and S6. The more popular elective subjects³ include Biology; Chemistry; Physics; Economics; Business, Accounting and Financial Studies; Geography; Information and Communication Technology; Chinese History; and Visual Arts (Annex : Table 1 [A]). Findings from the Survey suggest that the pattern of elective subjects offered by schools was similar to those of previous years.
5. Over 76% of secondary schools offered Applied Learning; about 1% of S4 students⁴ and 9% of S5 students studied Applied Learning courses⁵, and about 8% of S6 students registered for Applied Learning courses under the HKDSE, reflecting the diverse interests and learning needs of students (Annex : Table 1).

Students' choices of elective subjects remained diversified

6. About 98% of S4 and S5 students, and 93% of S6 students took two or three elective subjects (Annex : Table 2). Findings from the Survey suggest that the percentage of students taking three elective subjects has slightly increased 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 and S5 students, and 62% of S6 students took elective subjects from two or more KLAs (Annex : Table 3).
8. There were over 1 000 elective subject combinations each for S4 and S5; and around 900 elective subject combinations for S6 (Annex : Table 4). There were on average 35, 39 and 38 elective subject combinations per school at S4, S5 and S6 respectively (including Applied Learning courses⁵) (Annex : Table 4). The top 30 most popular combinations of elective subjects taken by S4, S5 and S6 students are tabulated at the Annex (Table 5).

² The Main Findings cover the senior secondary subject information from 445 ordinary schools.

³ 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.

⁴ Starting from the 2020/21 school year, "commencement of Applied Learning courses at S4" had been changed from pilot to regular basis and all schools could opt to commence Applied Learning courses at S4 and/or S5. As the S4 commencement option was new, most schools still opted to offer Applied Learning at S5 and S4 enrolment was relatively low.

⁵ Applied Learning Chinese (for non-Chinese speaking students) is not included.

9. Relatively more students⁶ took Biology; Chemistry; Economics; Physics; Business, Accounting and Financial Studies; Geography; Information and Communication Technology; Chinese History; and History (Annex : Table 1 [B]). The percentages of students taking the science subjects of Biology; Chemistry; and Physics were ranked among the top. The pattern of student enrolment was similar in S4, S5 and S6 and similar to past years.

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 the past few years, over 14% of S6 students took the Extended Part each year, 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). While the old and the new system are fundamentally different and should not be directly compared, the two sets of figures are still of considerable reference value. As the Mathematics Extended Part is gaining higher recognition by local universities (e.g. all eight publicly-funded universities will regard the Extended Part as an elective subject in their general entrance requirements from 2024 entry), and with the implementation of the optimising measures for the four senior secondary core subjects from the 2021/22 school year, schools are strongly advised to incorporate lessons of the Extended Part into the regular school timetable and 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 2020/21 school year, reflecting that these three subjects were very popular. With the implementation of the optimising measures for the four senior secondary core subjects starting from S4 in the 2021/22 school year, space has been created for students to study an additional elective subject. The EDB will continue to encourage schools to offer more subject groups of Biology, Chemistry and Physics, and provide other STEM⁷-related subjects and Applied

⁶ 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.

⁷ Science, Technology, Engineering and Mathematics.

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.

(iii) Chinese History

Chinese History has all along been an elective subject at the senior secondary level under the old and the new academic system. Under the new system, 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 more popular elective subjects taken by students. In the past few years, the percentage of S4 students taking Chinese History has been stable at around 14% regardless of the drop in the student population. 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 (2017)*. 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) Physical Education

In the last 10 years, schools offering Physical Education as a senior secondary elective subject (Physical Education Elective) at S4 has increased notably from 14% in the 2009/10 school year to around 25% in the 2020/21 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 under the new initiative of “Active Students, Active People” Campaign to deepen teachers' knowledge on factors affecting sports performance, 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.

(v) 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 2020/21 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 to form 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, provide a wide range of Applied Learning courses⁸ for students of different abilities, interests and aspirations, and provide different support measures to create favourable conditions for schools to encourage more students to study Applied Learning courses.

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January 2022**

⁸ The number of Applied Learning courses increased from 30 in the 2010–12 cohort to 45 in the 2021–23 cohort.

2020/21 School Year Survey Results**Table 1: Number and percentage of [A] schools' offering; and [B] students' taking of senior secondary subjects in 2020/21**

Senior secondary subject	S4				S5				S6			
	[A] Schools offered		[B] Students enrolled		[A] Schools offered		[B] Students enrolled		[A] Schools offered		[B] Students registered HKDSE ¹	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Chinese Language ²	442	99.5	47,366	96.8	444	99.8	44,098	97.2	443	99.6	41,856	96.9
English Language	444	100.0	48,910	100.0	445	100.0	45,391	100.0	445	100.0	43,076	99.7
Liberal Studies	444	100.0	48,877	99.9	445	100.0	45,390	99.998	445	100.0	43,061	99.7
Mathematics	444	100.0	48,910	100.0	445	100.0	45,391	100.0	445	100.0	43,076	99.7
Compulsory Part only	120	27.0	40,335	82.5	51	11.5	37,080	81.7	50	11.2	36,733	85.1
Compulsory Part + Module 1	156	35.1	2,950	6.0	202	45.4	2,902	6.4	213	47.9	2,252	5.2
Compulsory Part + Module 2	259	58.3	5,463	11.2	314	70.6	5,409	11.9	310	69.7	4,091	9.5
Compulsory Part + not-yet-specified Extended Part	6	1.4	162	0.3	0	0.0	0	0.0	--	--	--	--
Chinese Literature	120	27.0	1,600	3.3	125	28.1	1,364	3.0	132	29.7	1,270	2.9
Literature in English	28	6.3	378	0.8	32	7.2	318	0.7	30	6.7	243	0.6
Chinese History	403	90.8	6,970	14.3	397	89.2	6,358	14.0	400	89.9	5,666	13.1
Economics	414	93.2	14,208	29.0	415	93.3	12,368	27.2	418	93.9	11,268	26.1
Ethics and Religious Studies	80	18.0	1,177	2.4	82	18.4	842	1.9	80	18.0	730	1.7
Geography	405	91.2	9,403	19.2	411	92.4	8,600	18.9	407	91.5	7,887	18.3
History	304	68.5	5,781	11.8	306	68.8	5,178	11.4	304	68.3	4,811	11.1
Tourism and Hospitality Studies	192	43.2	3,840	7.9	198	44.5	3,655	8.1	195	43.8	3,262	7.6
Biology	433	97.5	15,465	31.6	433	97.3	13,541	29.8	431	96.9	12,045	27.9
Chemistry	427	96.2	14,961	30.6	425	95.5	13,019	28.7	420	94.4	11,345	26.3
Physics	424	95.5	11,893	24.3	425	95.5	10,612	23.4	429	96.4	9,258	21.4
Science: Combined Science	20	4.5	313	0.6	25	5.6	287	0.6	31	7.0	301	0.7
Biology + Chemistry	14	3.2	190	0.4	17	3.8	158	0.3	21	4.7	162	0.4
Chemistry + Physics	8	1.8	107	0.2	11	2.5	103	0.2	12	2.7	105	0.2
Physics + Biology	1	0.2	16	0.03	2	0.4	26	0.1	4	0.9	34	0.1
Science: Integrated Science	7	1.6	84	0.2	7	1.6	88	0.2	8	1.8	82	0.2
Business, Accounting and Financial Studies	407	91.7	11,803	24.1	406	91.2	10,207	22.5	403	90.6	8,989	20.8
Design and Applied Technology	51	11.5	842	1.7	45	10.1	539	1.2	50	11.2	532	1.2
Health Management and Social Care	47	10.6	983	2.0	47	10.6	879	1.9	46	10.3	759	1.8
Information and Communication Technology	405	91.2	7,036	14.4	404	90.8	5,995	13.2	406	91.2	5,359	12.4
Technology and Living	21	4.7	260	0.5	20	4.5	212	0.5	22	4.9	218	0.5
Food Science & Technology	17	3.8	228	0.5	15	3.4	162	0.4	16	3.6	175	0.4
Fashion, Clothing & Textiles	4	0.9	32	0.1	5	1.1	50	0.1	6	1.3	43	0.1
Music	87	19.6	274	0.6	74	16.6	171	0.4	52	11.7	132	0.3
Visual Arts	367	82.7	4,736	9.7	360	80.9	3,879	8.5	356	80.0	3,360	7.8
Physical Education	112	25.2	1,316	2.7	113	25.4	1,168	2.6	104	23.4	1,036	2.4
Applied Learning (no. of students) ³	34	7.7	412	0.8	342	76.9	4,263	9.4	339	76.2	3,283	7.6
Applied Learning (no. of enrolments) ³	34	7.7	412	--	342	76.9	4,371	--	339	76.2	3,356	--

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. In the 2020/21 school year, two schools participating in the Survey did not offer the local Chinese Language curriculum (leading to the HKDSE Examination) for S4 students, one participating school did not offer the local Chinese Language curriculum (leading to the HKDSE Examination) for S5 students, and two participating schools did not offer the local Chinese Language curriculum (leading to the HKDSE Examination) for S6 students.
- 3: Information as at 17 November 2020. Starting from the 2020/21 school year, “commencement of Applied Learning courses at S4” had been changed from pilot to regular basis and all schools could opt to commence Applied Learning courses at S4 and/or S5. There were 20, 38 and 36 Applied Learning courses offered respectively to S4 (2021-23 cohort), S5 (2020-22 cohort) and S6 (2019-21 cohort) students in the 2020/21 school year; Applied Learning Chinese (for non-Chinese speaking students) was not included. The number of schools that offered and students enrolled in Applied Learning courses at S4 in the 2020/21 school year did not include the Applied Learning courses offered in the 2nd term of the school year. As the S4 commencement option was new, most schools still opted to offer Applied Learning at S5 and S4 enrolment was relatively low.

Table 2: Number of elective subjects taken by senior secondary students in 2020/21

No. of elective subjects taken	S4	S5	S6 (HKDSE registration data)
	% of students	% of students	% of students
≤ 1	0.76%	1.82%	6.68%
2	66.06%	67.26%	72.96%
3	31.78%	30.32%	20.11%
≥ 4	1.40%	0.60%	0.25%
Total	100%	100%	100%

Table 3: Cross-Key Learning Area (KLA) elective subject-taking by senior secondary students in 2020/21

No. of KLA(s)	S4	S5	S6 (HKDSE registration data)
	% of students	% of students	% of students
≤ 1	31.57%	32.48%	38.44%
2	60.30%	58.99%	56.67%
3	7.87%	8.44%	4.84%
≥ 4	0.26%	0.09%	0.05%
Total	100%	100%	100%

Table 4: Number of elective subject combinations in 2020/21

No. of elective subjects taken ⁴	S4		S5		S6 (HKDSE registration data)	
	Subject combination		Subject combination		Subject combination	
	No.	%	No.	%	No.	%
≤ 1	19	1.53%	21	1.90%	23	2.64%
2	212	17.06%	222	20.07%	221	25.40%
3	721	58.00%	710	64.20%	563	64.71%
≥ 4	291	23.41%	153	13.83%	63	7.24%
Total	1,243	100%	1,106	100%	870	100%
Average no. of elective subject combinations per school	34.89		38.62		37.54	

Note 4: 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 most popular elective subject combinations taken by senior secondary students in 2020/21

Order	S4			S5			S6 (HKDSE registration data)		
	Subject combination ⁵	Students enrolled		Subject combination ⁵	Students enrolled		Subject combination ⁵	Students enrolled	
		No.	%		No.	%		No.	%
1	BIO CHEM	2,864	5.86%	BIO CHEM	2,582	5.69%	BIO CHEM	2,718	6.29%
2	BAFS ECON	2,696	5.51%	BAFS ECON	2,479	5.46%	BAFS ECON	2,692	6.23%
3	BIO CHEM PHY	2,342	4.79%	CHEM PHY	2,219	4.89%	CHEM PHY	2,253	5.22%
4	CHEM PHY	2,168	4.43%	BIO CHEM PHY	1,905	4.20%	BIO CHEM PHY	1,417	3.28%
5	BIO CHEM ECON	1,238	2.53%	ICT PHY	987	2.17%	ICT PHY	967	2.24%
6	ICT PHY	1,082	2.21%	BIO CHEM ECON	908	2.00%	ECON GEOG	955	2.21%
7	CHI_HIST HIST	1,010	2.07%	CHI_HIST HIST	860	1.89%	CHI_HIST HIST	953	2.21%
8	BIO GEOG	850	1.74%	BIO GEOG	859	1.89%	BIO GEOG	879	2.04%
9	ECON GEOG	818	1.67%	ECON GEOG	799	1.76%	BIO ECON	754	1.75%
10	CHEM ECON PHY	740	1.51%	CHI_HIST GEOG	677	1.49%	BIO CHEM ECON	736	1.70%
11	CHI_HIST GEOG	669	1.37%	BIO ECON	641	1.41%	CHI_HIST GEOG	704	1.63%
12	GEOG THS	648	1.32%	GEOG THS	595	1.31%	ECON PHY	637	1.47%
13	BIO ECON	632	1.29%	GEOG HIST	579	1.28%	GEOG HIST	628	1.45%
14	BAFS ICT	623	1.27%	CHEM ECON PHY	572	1.26%	CHI_HIST ECON	551	1.28%
15	GEOG HIST	602	1.23%	BAFS BIO	566	1.25%	BAFS BIO	535	1.24%
16	BAFS BIO	580	1.19%	BAFS ICT	516	1.14%	BAFS GEOG	532	1.23%
17	BAFS THS	545	1.11%	CHI_HIST ECON	516	1.14%	BAFS ICT	525	1.22%
18	BIO CHEM GEOG	505	1.03%	ECON PHY	503	1.11%	BIO PHY	516	1.19%
19	CHI_HIST ECON	502	1.03%	BAFS GEOG	463	1.02%	GEOG THS	480	1.11%
20	BAFS PHY	499	1.02%	BAFS THS	454	1.00%	ECON HIST	442	1.02%
21	BAFS CHI_HIST	471	0.96%	BIO PHY	427	0.94%	CHEM ECON PHY	433	1.00%
22	ECON PHY	470	0.96%	ECON ICT	425	0.94%	BAFS THS	423	0.98%
23	BAFS GEOG	457	0.93%	GEOG PHY	425	0.94%	ECON ICT	406	0.94%
24	ECON ICT	453	0.93%	BAFS PHY	418	0.92%	BAFS CHI_HIST	396	0.92%
25	BIO ICT	447	0.91%	BAFS CHI_HIST	405	0.89%	CHI_HIST CHI_LIT	394	0.91%
26	GEOG PHY	432	0.88%	BAFS BIO CHEM	400	0.88%	GEOG PHY	390	0.90%
27	CHEM ICT PHY	418	0.85%	BIO CHEM GEOG	391	0.86%	BAFS PHY	364	0.84%
28	GEOG ICT	416	0.85%	ECON HIST	383	0.84%	CHEM ECON	364	0.84%
29	BAFS ECON GEOG	409	0.84%	CHEM ICT PHY	364	0.80%	BIO ICT	341	0.79%
30	ICT VA	405	0.83%	BIO ICT	357	0.79%	BAFS BIO CHEM	292	0.68%
	TOTAL:	25,991	53.14%	TOTAL:	23,675	52.16%	TOTAL:	23,677	54.82%

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.

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