

# Schola Europaea

# **European Baccalaureate Unit**Office of the Secretary-General

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# **Report on European Baccalaureate 2019**

Approved by the Board of Governors of the European Schools On its meeting of 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> December 2019 – OSGES Brussels

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# 1. Abbreviations

	SCHOOLS
*BRI	Liceo scientifico "Fermi Monticelli" Brindisi
*CUL	Europa School UK
*DHG	Europese School Den Haag
*HEL	European Schooling Helsinki
*HER	School of European Education Heraklion
*MAN	École internationale de Manosque
*PAR	Scuola per l'Europa di Parma
*RHM	Europäische Schule RheinMain
*STR	École européenne de Strasbourg
*TAL	Tallinna Euroopa Kool
ALI	Alicante
BER	Bergen
BR 1 / UCC	Bruxelles 1
BR 2 / WOL	Bruxelles 2
BR 3 / IXL	Bruxelles 3
BR 4 / LAE	Bruxelles 4
FRF	Frankfurt
KAR	Karlsruhe
LUX 1 / LUX	Luxembourg 1
LUX 2 / MAM	Luxembourg 2
MOL	Mol
MUN	Munich
VAR	Varese

	LAN	GUAGES
1	BG	Bulgarian
2	CS	Czech
3	DE	German
4	DA	Danish
5	EL	Greek
6	EN	English
7	ES	Spanish
8	ET	Estonian
9	FI	Finnish
10	FR	French
11	GA	Gaelic
12	HR	Croatian
13	HU	Hungarian
14	IT	Italian
15	LT	Lithuanian
16	LV	Latvian
17	MT	Maltese
18	NL	Dutch
19	PL	Polish
20	PT	Portuguese
21	RO	Romanian
22	SK	Slovakian
23	SL	Slovene
24	SV	Swedish

	OTHER
EB	European Baccalaureate

SUBJECTS						
ART:	Artistic Education	ar4 – Art (4 hours)	Written			
BIO:	Biology	bi2 – Biology (2 hour option)	Oral			
DIO.	Віоюду	bi4 – Biology (4 hour option)	Written or Oral			
CHI:	Chemistry	chi – Chemistry	Written or Oral			
ECO:	Economics	eco – Economics	Written			
GEO:	Geography	ge2 – Geography (2 hour option)	Oral			
GLO.	Geography	ge4 – Geography (4 hour option)	Written or Oral			
GRE ANC.:	Ancient Greek	gre – Ancient Greek	Written			
HI:	History	hi2 – History (2 hour option)	Oral			
111.	riistory	hi4 – History (4 hour option)	Written or Oral			
		I1 – Language I	Written and Oral			
L (1):	Language	I2 – Language II	Written and/or Oral			
L (1).	Basic course	I3 – Language III	Written or Oral			
		I4 – Language IV	Written or Oral			
(L I) A:	Language	I1a – Language I Advanced	Written and Oral			
(L I) A.	Advanced course	I2a – Language II Advanced	Written and/or Oral			
LAT:	Latin	lat – Latin	Written			
		ma3 – Math (3 hour option)	Written			
MATH:	Mathematics	ma5 – Math (5 hour option)	Written			
		maa – Math Advanced	Oral			
MUS:	Musical Education	mu4 – Music (4 hour option)	Written			
ONL:	Other National Language	onl – Other National Language	Written or Oral			
PH:	Philosophy	ph2 – Philosophy (2 hour option)	Oral			
	Т ппозорну	ph4 – Philosophy (4 hour option)	Written or Oral			
PHY:	Physics	phy - Physics	Written or Oral			

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# 2. Introduction

The 60<sup>th</sup> session of the European Baccalaureate was chaired by Prof. Andreas Fotopoulos, European Baccalaureate President, from Greece. 2175 candidates, from 13 European Schools and 10 Accredited Schools (this year we have welcomed the Accredited European School of Den Haag to its first European Baccalaureate session), registered for the European Baccalaureate 2019 session.

EB session 20	119 - participants
Registered	2198
Abandoned	23
Participated	2175
Passed	2136
Failed	39
Success rate	98.21%
Fail rate	1.79%

European Baccalaureate 2019 – Aver	ages
Overall Average for the Preliminary Mark	80.44
Overall Average for Written Examinations	75.17
Overall Average for Oral Examinations	82.09
Overall Average for the Final Mark	78.84

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# 3. The European Baccalaureate Examinations

#### 3.1. Structure of the examinations

The structure of the European Baccalaureate examinations is defined in Article 3, "Uniformity of examinations", of the Arrangements for Implementing the European Baccalaureate Regulations, which specifies that:

#### ARTICLE 3 — UNIFORMITY OF EXAMINATIONS

3.1 Uniformity of Examinations

The following can be the subject of written and oral European Baccalaureate examinations:

- Compulsory subjects (with the exception of Physical Education and Religion/Ethics)
- Options
- Advanced subjects

All written European Baccalaureate examinations carry the same weighting.

All oral European Baccalaureate examinations carry the same weighting.

- 3.1.1 All written European Baccalaureate examinations will be the same for all candidates, irrespective of the language section to which they belong.
  - The examinations in Languages 1, 2, 3 and 4 are different in so far as the examination papers are set with reference to texts in the original languages. However, they must also follow the general harmonisation framework.
- 3.1.2 In Language 1, basic course, a uniform examination will be taken by all the pupils in the same language section. The same applies to Language 1, advanced course.
- 3.1.3 In Foreign Languages, a uniform examination will be taken in each language and at each level by candidates from all language sections.

	LI – basic or advanced course
5 written	LII – basic or advanced course
examinations	Mathematics – 3-periods or 5-periods course
	Two 4-period options
	LI – basic or advanced course
	LII – basic or advanced course
3 oral	or History 2 p. or 4 p. (if not chosen as written examination)
examinations	or Geography 2 p. or 4 p.(if not chosen as written examination)
	1 subject chosen by the pupil among the 2-period compulsory subjects and the 4-period options
	or Advanced Mathematics (compulsory for pupils who followed this course).

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#### 3.2. Additional written examinations

Article 13 of the Arrangements for implementing the regulations for the European Baccalaureate establishes that candidates may be allowed to sit for an additional written examination of an option subject and the conditions therefor.

#### Article 13 states that:

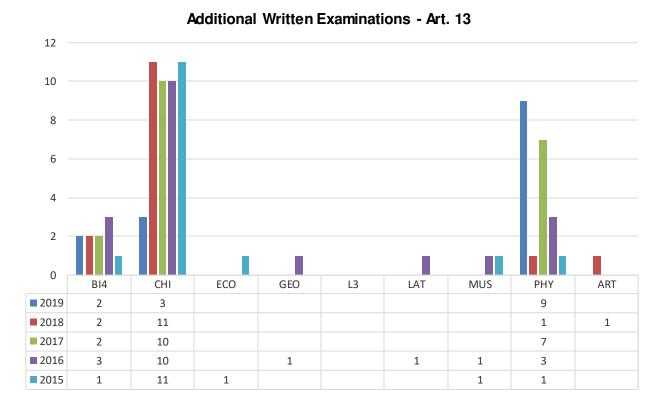
- 13.1 In particular cases, European School pupils in the final school year may register for the European Baccalaureate in an additional option subject, whether or not they have attended lessons in the subject in question at the School.
  - However, in the case of Music and Art, due to specific syllabus requirements, an additional exam can only be applied for if the pupil has followed the subject or if he provides evidence of the prescribed work done during s6 and s7 so as to ensure that the syllabus requirements are met. (...)
- 13.4 Only written examinations will be available (...)
- 13.4.2 The examination script will be corrected, in the same conditions as normal European Baccalaureate examination scripts. (...)
- The result in this additional written examination will not be included for the purposes of calculating the final mark appearing on the candidate's Certificate of European Baccalaureate Marks, but will be shown on an Additional Examination Certificate signed by the Secretary-General of the European Schools (...).

The graph below shows the evolution of requests for an additional written examination.

16 requests were received this year, 16 were accepted.

2 candidates finally withdrew their request before the examinations. Therefore, only 14 additional written examinations were taken under article 13 at the 2019 EB session with an average mark of 6.93 and a success rate of 64.29%

Physics is this year the most popular subjects chosen (in 5 different languages) as an additional examination.



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# 3.3. Correction of the European Baccalaureate Examinations: the On-line Correction System

For the third time, the scripts of the European Baccalaureate session were corrected on-line, through the Viatique system, by Exatech, the French company which won the call for tender launched in 2016 by the OSG.

Following the observation made by the different stakeholders of the system (Inspectors, teachers, external examiners, schools and European Baccalaureate unit) during the previous session in 2018, some adaptations have been made in order to better suit the European Baccalaureate regulations and to optimize and simplify some tasks, as for instance among others:

- follow up of the corrections for inspectors
- management of third corrections
- viewing of the scripts in the schools
- details of the viewing of the scripts on the screen
- administration panel



The implementation of the on-line correction system during the European Baccalaureate session 2019 was this year again very successful thanks to everybody's efforts and co-operation.

This system has shown great potential for the continuous improvement of the quality of assessment of the written European Baccalaureate examinations and for enhancing the efficiency of all the phases in the correction process.

We want to recall some key features supported by the on-line platform:

## Scanning of the examination scripts

The scanning of the scripts were made in each examination center. The scripts were compacted and uploaded automatically to a secure server with an encrypted connection.

The scanning of the examination scripts allowed scripts to be available earlier for second correctors, with the advantage of extending the correction period for second correction.

This year the paper examination scripts stayed in the schools. Therefore this is the second year that was not needed to send the papers to the corrections centers.

The scanning of the 2019 European Baccalaureate scripts went extremely well and fast. Almost all scripts were scanned right after the examination according to the schedule foreseen, and there was no delay in their distribution to the correctors.

The readability of the scripts on the screen was very good. The scanning of special formats for pupils with special arrangements was also successful.

A survey was conducted and 98.96% of the teachers and external correctors think that the readability of the scripts on the screen is good or very good.

## **Anonymity**

Anonymity of the scripts resulted in the unbiased assessment of candidates. This was automated during the scanning process.

Mod.EURSC-DACTYLO ©NEOPTEC Surname / Nom Nachname :		T															
Name / Prénom Vorname :																	
BAC ID :					Date	of bi	rth / I eburt	Né(e) sdati	le um :			/			]/		
Subject / Matière / Fach : Language / Langue / Sprach			 	E	xam	date	/ Date	e de	l'exa	men /	/ Prüf	ungs	datur	m :		 	 

All examinations subjects' scripts were anonymized, with the exception of Art and Music. The written part of these examinations also went on the official examination paper, which was scanned. The rest

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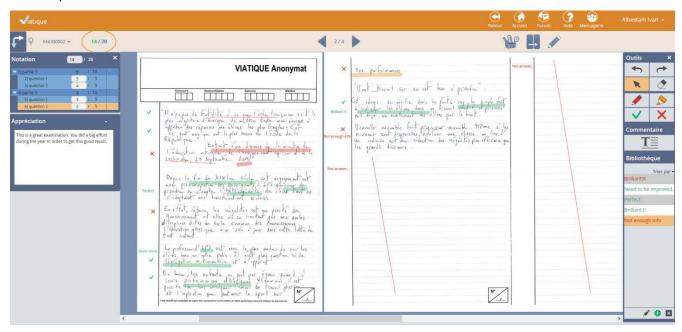
of the parts, preparation and final art work was provided to the correctors in original form. So that the written part could be related to the rest of the parts. However, the marks for all parts and the final commentary was introduced in the on-line correction platform.

#### Criteria referenced

All examinations were accompanied by a marking scheme and grid, correction criteria and guidelines and/or suggested answers. These were known to the correctors and served as a benchmark to assess the examinations and award marks, through the forum in the Viatique software.

## Multiple correction and marking: Internal / External

The on-line tools allowed the same script to be corrected by more than one corrector. In our system, every script is corrected twice. A third corrector can be involved if there is a mark disagreement of over 2 points between the two correctors.



The on-line platform also made it possible to make sure that each corrector corrected regularly and added a final general mandatory commentary as established in the regulations. To validate the correction of a single script the corrector only needed to have entered the marks for every question and the final commentary, otherwise the "Validate" button would not be active.

## Random allocation of the scripts

On-line correction tool allowed distributing evenly scripts from different schools to different correctors. Before, so as to simplify the logistics, it was normally one corrector who corrected all the scripts from the same class/school.

### **Blind correction**

On-line correction tools allowed scripts to have marking signs, symbols and comments without them being accessible to the second corrector, so that the second correction remained unbiased.

However, all these elements were accessible to the third corrector (in the cases of mark disagreement over 2 marks), the inspectorate and European Baccalaureate Unit.

### Blended model

The first correction was still carried out internally by the teacher of the candidate in the European Schools and the Accredited Schools.

The second correction was carried out by a corrector external to the European School system in a correction center (European Schools) where 1 or 2 days' meetings were organized between the inspectors and the external correctors in order to discuss correction guidelines and practice. Training and assistance on the use of the on-line platform was provided for the new external correctors as

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last year. European Baccalaureate Unit was present in the correction centers to support the external correctors and the inspectors during the correction period as well as Exatech experts remotely.

6 correction centres were open for correcting all the written examination by the external examiners:

SUBJECTS	CENTRES	ATTENDANTS
All Languages (except ES and IT) All Other Subjects: Ancient Greek ART in DE, FR, EN, NL GEOGRAPHY, HISTORY, LATIN, ONL, PHILOSOPHY, MUSIC	Brussels 1 - Uccle	14 inspectors 83 external correctors
Science papers: Biology, Chemistry, Physics, MA 3P, MA 5P, Economics + PT L1 and L4	Brussels 4 – Laeken	6 inspectors 65 external correctors
Languages ES, Art in ES	Alicante	1 inspector 11 external correctors
Languages IT, Art in IT	Varese	1 inspector 8 external correctors
Art in EL and EN (from Heraklion)	Heraklion	1 external corrector
Art in IT	Brindisi	1 external corrector

75 external examiners decided to correct their scripts from home through the on-line correction platform, being this fact very significant because this assumes that the platform works very well and they do not need assistance on-site.

## Retrieving evidence and accessibility to corrected scripts

Corrected scripts were easily accessible since they are stored in a secured server accessible anytime from anywhere. This also eliminates the difficulty of retrieving documents in case of appeals and especially during periods where many members of the staff in the schools are on holiday.

#### **Correctors training**

The on-line correction tools are easy to use. There is an on-line tutorial and a help-line. The electronic tools be web-based so that no software needs to be installed in the correctors' own computers. Still, assistance for correctors and short refresher trainings were provided in the correction centers.

#### Corrector's assessment

The on-line tools were able to inform on correctors' performance. Analysis of standard deviation on the corrected items or papers was possible.

### Possibility of moderation

The on-line tools allow automated recalculation of values either for the whole examination or for individual questions as a result of the modification of values in the different questions of an examination or due to the cancellation of one or several questions.

## Monitoring of the correction process

On-line correction tools allow monitoring and validation of the correction process. They provide immediate access to statistics on performance.

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# 4. Assurance Quality of the 2019 European Baccalaureate session

## 4.1. The European Baccalaureate Subjects

The European Baccalaureate examinations are elaborated under the responsibility of the secondary cycle inspectors listed below, assisted by teams of external experts. For the 2019 EB session, 158 experts participated in the elaboration of 300 examination papers (148 main papers and 152 reserve papers). Each examination paper was accompanied by suggested answers, assessment criteria, marking instructions and marking grid.

The Board of Inspectors (Secondary) may decide to submit written European Baccalaureate examinations to external auditing in order to add a further layer of quality assurance.

The external auditing of the examination papers is performed by independent experts with experience in the field of assessment. These experts are proposed by the Chairman of the European Baccalaureate Examining Board.

For the European Baccalaureate session of 2019, the examination papers of Biology, Chemistry, Mathematics 3P, Mathematics 5P, Physics and History were audited externally and were found fit for purpose.

# 4.2. Quality control of the European Baccalaureate examinations proceedings

Quality control of the written and oral examinations in the 23 participating schools was carried out by the Vice-Chairmen. In order to supervise the proceedings, the Vice-Chairmen visited the assigned examination centers for up to 2 days during the written examinations and for a maximum of 4 days per center throughout the oral examinations' period. This year the supervision of the examination centers was distributed as follows:

School	The Vice-Chairmen and Quality Control
►ALICANTE	Ms Miriam STANONIK
▶BERGEN	Ms UrszulaŁĄCZYŃSKA
▶BRUSSELS 1	Ms Karin ECKERSTORFER, Mr Darko TOT
▶BRUSSELS 2	Ms Els VERMEIRE, Ms Anne DEPUIS, Ms Ulla KAMP
▶BRUSSELS 3	Mr Lars DAMKJAER, Mr Jean-Pierre GROSSET-BOURBANGE, Ms Maria Dolores COLEIRO
▶BRUSSELS 4	Ms Veselina GANEVA, Mr Javier GARRALÓN BARBA
▶FRANKFURT	Mr Paul METCALF
►KARLSRUHE	Mr Max WOLFF, Mr Alper YILMAZ
►LUXEMBOURG 1	Ms Renata JURANOVA, Ms Lynda O'TOOLE
►LUXEMBOURG 2	Ms Violeta VALIUŠKEVIČIENÉ, Ms Olita ARKLE
►MOL	Ms Gabriela DROC, Ms Irina GEORGESCU
►MUNICH	Mr Helder GUERREIRO
▶VARESE	Ms Luca NEMESKÉRI

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▶*BRINDISI	Ms Karin ECKERSTORFER
▶*EUROPASCHOOL UK	Ms Diana SACCARDO
►*DEN HAAG	Ms Tuulamarja HUISMAN
►*HELSINKI	Ms UrszulaŁĄCZYŃSKA
►*HERAKLION	Mr Lars DAMKJAER
►*MANOSQUE	Mr Paul METCALF
►*PARMA	Ms Jana HANDZELOVA
►*RHEINMAIN	Ms Ulla KAMP
▶*STRASBOURG	Mr Loizos ANASTASIADES
►*TALLINN	Mr Alex COENEN

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# 4.3. Inspectors responsible for the different subjects

Subject	Language	Inspector					
ANCIENT GREEK		Ms Margarita KALOGRIDOU					
ART		Ms Luca NEMESKÉRI					
BIOLOGY		Mr Max WOLFF					
CHEMISTRY		Mr Alex COENEN					
ECONOMICS		Mr Helder GUERREIRO					
GEOGRAPHY		Ms Margarita KALOGRIDOU					
HISTORY		Ms Helena COELHO					
	1	Ms Renata JURANOVA					
	BG	Ms Veselina GANEVA					
	CS	Ms Renata JURANOVA					
	DA	Mr Lars DAMKJAER					
	DE	Ms Karin ECKERSTORFER					
	EL	Ms Margarita KALOGRIDOU					
	EN	Mr Paul METCALF					
	ES	Mr Javier GARRALÓN BARBA					
	ET	Ms Ulla KAMP					
	FI	Ms Tuulamarja HUISMAN					
	FR	Mr Jean-Pierre GROSSET-BOURBANGE					
	1 11	& Ms Anne DEPUIS					
	HR	Mr Darko TOT					
LANGUAGE I	HU	Ms Luca NEMESKÉRI					
LANGUAGE I	Π	Ms Diana SACCARDO					
	LT	Ms Violeta VALIUŠKEVIČIENÉ					
	LV	Ms Olita ARKLE					
	MT	Ms Maria Dolores COLEIRO					
	NL	Ms Linde VAN DEN BOSCH					
	146	& Ms Els VERMEIRE					
	PL	Ms Urszula ŁĄCZYŃSKA					
	PT	Ms Helena COELHO					
	' '	Mr Helder GUERREIRO					
	RO	Ms Gabriela DROC, Ms Irina GEORGESCU					
	SK	Ms Jana HANDZELOVÁ					
	SL	Ms Miriam STANONIK					
	SV	Mr Alper YILMAZ					

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Subject	Language	Inspector					
	DE	Ms Karin ECKERSTORFER					
	EL	Ms Margarita KALOGRIDOU					
		& Mr Loizos ANASTASIADES					
	EN	Mr Paul METCALF					
	LIN	& Ms Lynda O'TOOLE					
	ES	Mr Javier GARRALÓN BARBA					
	FI	Ms Tuulamarja HUISMAN					
	ED	Mr Jean-Pierre GROSSET-BOURBANGE					
LANGUAGE II, III, IV	FR	& Ms Anne DEPUIS					
	GA	Ms Lynda O'TOOLE					
	Π	Ms Diana SACCARDO					
	MT	Ms Maria Dolores COLEIRO					
	NII	Ms Linde VAN DEN BOSCH					
	NL	& Ms Els VERMEIRE					
	PT	Ms Helena COELHO					
	PI	Mr Helder GUERREIRO					
	SV	Mr Alper YILMAZ					
LATIN		Mr Jean-Pierre GROSSET-BOURBANGE					
MATHEMATICS OF SER		Mr Alper YILMAZ					
MATHEMATICS 3P & 5P		& Ms Urszula ŁĄCZYŃSKA					
MUSIC		Ms Miriam STANONIK					
	FI	Ms Tuulamarja HUISMAN					
OTHER NATIONAL	GA	Ms Lynda O'TOOLE					
LANGUAGE	MT	Ms Maria Dolores COLEIRO					
	SV	Ms Tuulamarja HUISMAN					
PHILOSOPHY		Ms Els VERMEIRE					
DLIVOICO		Ms Urszula ŁĄCZYŃSKA					
PHYSICS		& Mr Alper YILMAZ					

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# 5. The European Baccalaureate Candidates

# 5.1. Number of candidates in the 2019 European Baccalaureate session

**European School of (ES)** 

	(=0)		
1.	Alicante	(ALI)	75 candidates
2.	Bergen	(BER)	30 candidates
3.	Bruxelles 1 – Uccle	(Br 1 - UCC)	269 candidates
4.	Bruxelles 2 – Woluwé	(Br 2 - WOL)	245 candidates
5.	Bruxelles 3 – Ixelles	(Br 3 - IXL)	206 candidates
6.	Bruxelles 4 – Laeken	(BR 4 - LAE)	189 candidates
7.	Frankfurt	(FRF)	84 candidates
8.	Karlsruhe	(KAR)	69 candidates
9.	Luxembourg I	(LUX)	185 candidates
10.	Luxembourg II	(MAM)	153 candidates
11.	Mol	(MOL)	73 candidates
12.	Munich	(MUN)	174 candidates
13.	Varese	(VAR)	108 candidates

1860 candidates

**European Accredited Schools (EAS)** 

1.	Liceo Scientifico "Fermi-Monticelli" – European High School Brindisi	(*BRI)	25 candidates
2.	Europa School UK	(*CUL)	32 candidates
3.	Europese School Den Haag	(*DHG)	20 candidates
4.	European Schooling Helsinki	(*HEL)	19 candidates
5.	The School of European Education of Heraklion	(*HER)	7 candidates
6.	École internationale de Manosque	(*MAN)	19 candidates
7.	Scuola per l'Europa di Parma	(*PAR)	31 candidates
8.	The European School RheinMain	(*RHM)	100 candidates
9.	École européenne de Strasbourg	(*STR)	55 candidates
10.	Tallinna Euroopa Kool	(*TAL)	7 candidates

315 candidates

TOTAL NUMBER OF CANDIDATES EB Session 2019 2.175 candidates

## **Number of examinations**

	Cands.	Written Exams	Total Written Exams	Additional Exams	Grand Total Written Exams	Oral Exams	Total Oral Exams	TOTAL EXAMS
ES	1.860	5 per cand.	9.300	13	9.313	3 per cand.	5.580	14.893
AES	315	5 per cand.	1.575	1	1.576	3 per cand.	945	2.521
TOTAL	2.175		10.875	14	10.889		6.525	17.414

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The number of candidates to the 2019 Baccalaureate examination session, by school and by subject, can be seen in the following tables:

# **WRITTEN EXAMINATIONS**

	* BRI	*cuL	*DHG	*HEL	*HER	*MAN	*PAR	*BHM	*STR	*TAL	ALI	BER	FRF	IX	KAR	LAE	LUX	MAM	MOL	MUN	OOC	VAR	MOL	Total
AR4	2	15	1	2	2	4		26	6	1	21	3	10	19	8	30	23	16	12	19	33	8	30	291
BI4	6	6	8	6	2	8	11	2	7		18	10	23	56	8	54	44	44	13	59	47	21	61	514
CHI	10	8	5	5		10	6	13	16	1	18	8	26	73	10	50	44	29	21	47	68	20	66	554
ECO	4	5	7	3			5	36	11	5	2	7	18	53	20	45	45	34	28	20	30	41	42	461
GE4		5		2		3		32	8	2	7		15	10	28	30	15	15	12	27	22	21	39	293
GRO																				3				3
HI4	1	2		5	4	1	7	23	8	1	5	7	10	48	4	30	45	30	12	32	90	8	51	424
L1-	25	28	20	19	7	19	28	100	45	7	68	30	74	196	69	185	175	148	73	167	247	99	241	2070
L1A		4					3		10		7		10	10		4	10	5		7	22	9	4	105
L2-	25	32	20	19	7	19	29	91	48	7	67	22	75	191	66	174	165	136	64	165	251	103	227	2003
L2A							2	9	7		8	8	9	15	3	15	20	17	9	9	18	5	18	172
L3-	15	7	9	2	2	3	11	16	23	4	30	7	31	58	18	52	54	42	13	53	114	39	86	689
L4-	3			2	1	1	6	20	4		17		6	34	3	20	15	26		17	45	21	37	278
LAT							1									4								5
MA3	17	21	4	4	7	2	14	81	25	4	44	14	48	114	50	96	99	88	47	88	153	54	113	1187
MA5	8	11	16	15		17	17	19	30	3	31	16	36	92	19	93	86	65	26	86	116	54	132	988
MU4		5						4					3			6	7	6		2	5			38
ONL																				1				1
PH4	3	3	2	4	2		3	16	7		11	5	8	7	22	9	23	19	21	17	23	11	13	229
PHY	6	8	8	7	1	9	12	12	20		21	13	19	56	17	49	56	46	16	51	61	26	70	584
Total	125	160	100	95	35	96	155	500	275	35	375	150	421	1032	345	946	926	766	367	870	1345	540	1230	10889

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# **ORAL EXAMINATIONS**

	* BB	T∩O <sub>*</sub>	*DHG	* HEL	*HER	*MAN	*PAR	*RHM	*STR	*TAL	ALI	BER	FRF	IXL	KAR	LAE	LUX	MAM	MOL	MON	OOO	VAR	MOL	Total
BI2	6	8	1	1	2	2	1	28	12		13	3	25	9	17	21	34	26	21	23	59	12	42	366
BI4	3	7					2	9	11		2	6	8	8	3	3	17	3	7	17	13		8	127
CHI			2			1	5		2		4		1	4	3	3	5	2		10	3	1	12	58
GE2	2	9	4	1	1	6	4	9	10		1	5	11	7	3	26	18	12	13	40	92	23	4	301
GE4		1							4				1	4		1	4	2		17	14	7		55
HI2	8	2	14	1	1	8	12	19	20	2	9	8	17	13	12	49	13	18	24	31	22	9	23	335
HI4		1					1		3			1				3	2	1		2	8	3	7	32
L1-	25	28	20	19	7	19	28	100	45	7	68	30	74	196	69	185	175	148	73	167	247	99	241	2070
L1A		4					3		10		7		10	10		4	10	5		7	22	9	4	105
L2-	15	19	2	17	5	5	13	64	14	5	57	10	47	167	53	97	128	103	30	76	124	64	194	1309
L2A							1	8	4		8	6	8	15	3	13	20	17	6	8	11	2	18	148
L3-	4	1	1	4		1	2	2	1	1	11		7	24	2	16	20	20	12	21	16	8	21	195
L4-						2	1	2			1		1	6	2	8	3	5		2	10	2	8	53
MAA		5				5	2	5	6		11	5	10	24	4	21	11	8	2	19	23	11	31	203
ONL																		1				1		2
PH2	12	5	13	12	2	8	17	46	23	6	27	13	21	112	30	101	78	75	27	76	129	60	99	992
PH4		6	1	2	3		1	8			3	2	10	17	5	15	11	12	3	6	14	13	18	150
PHY			2								3	1	1	2	1	1	6	1	1				5	24
Total	75	96	60	57	21	57	93	300	165	21	225	90	252	618	207	567	555	459	219	522	807	324	735	6525

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# 5.2. Participation in the European Baccalaureate 2019 session by school and by language section

Of the 2198 pupils registered for the European Baccalaureate at the beginning of the 2018-2019 school year, 2175 actually took part in the examinations, 23 pupils having given up their studies in mid-year or during the European Baccalaureate session.

During the written examinations, 31 candidates were partially absent due to medical reasons or to participation in UNED among the 37 reserve written examinations. Therefore 21 different examinations were organized for the reserve session in June 2019.

Subject	Language	Number of Written Examinations (June)	Number of used reserve papers
	DE	1	1
BIOLOGY	EN	4	1
	FR	2	1
CHEMISTRY	DE	1	1
CHEWISTKI	FR	1	1
GEOGRAPHY	EN	2	1
HISTORY	FR	1	1
	DE	3	1
L1	ES	2	1
	FR	1	1
L2	EN	3	1
LZ	FR	2	1
	DE	2	1
L3	EN	1	1
	ES	1	1
	EN	3	1
MATH 3P	ES	1	1
	NL	1	1
MATH 5P	EN	2	1
PHYSICS	EN	2	1
F1113103	SV	1	1
	TOTAL	37	21

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This year an extraordinary session in September has been necessary for 3 candidates who sat 11 reserve examinations. 11 extraordinary reserve scripts had to be prepared and used.

Written Examinations (September)	Language	Number of candidates	Number of used reserve papers
CHEMISTRY	FR	1	1
GEOGRAPHY	DE	1	1
L1	EN	1	1
LI	FR	1	1
L2	DE	1	1
LZ	EN	1	1
L3	NL	1	1
MATH 3P	FR	1	1
IVIAI II SP	EN	1	1
PHILOSOPHY 4P	EN	1	1
PHYSICS	FR	1	1
	TOTAL	11	11

In addition to the previous mentioned written reserve examinations, 2 candidates sat the following 6 oral examinations.

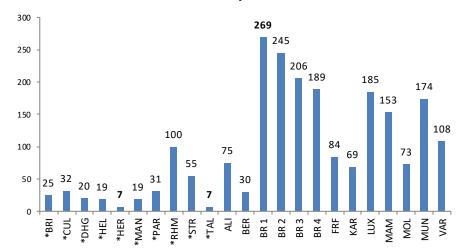
Oral Examinations (September)	Language	Number of candidates				
BIOLOGY	EN	1				
HISTORY	EN	1				
L1	FR	1				
LI	DE	1				
L2	EN	1				
PHILOSOPHY 2P	FR	1				
	TOTAL	6				

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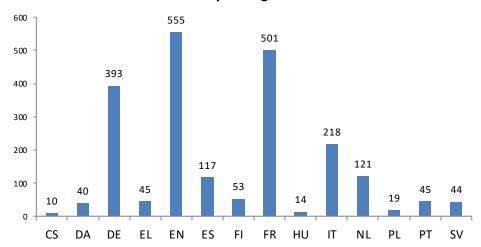
The largest number of European Baccalaureate candidates per school came from the European School of Brussels 1 (269).

The lowest cohort, 7 pupils, belongs to an Accredited Schools of Tallinn (Estonia) and Heraklion (Greece).

## Number of candidates per school - EB 2019



## Number of candidates per linguistic section - EB 2019

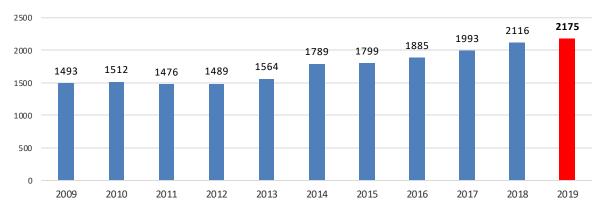


The largest number of European Baccalaureate candidates per language section can be found in the English language section, with 555 candidates, closely followed candidates from the French section, 501, and the German section, 393.

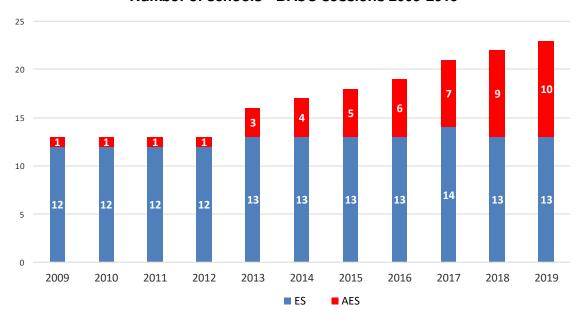
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# 5.3. Evolution of the number of schools and candidates over the years

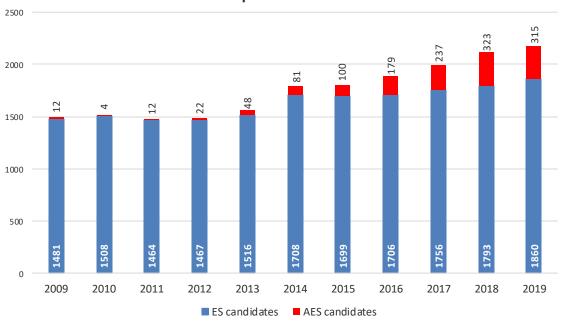
## Number of candidates EB sessions 2009-2019



## Number of schools - BACC sessions 2009-2019



# Number of candidates per AES and ES - Sessions 2009-2019



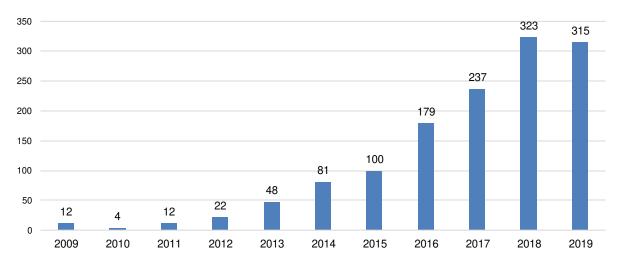
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Evolution of the AES candidates (considering 2009 as the 1st year of AES in EB session)

Sessions	ES candidates	AES candidates	Total	Evolution AES (2009 as reference)
2009	1481	12	1493	1.00
2010	1508	4	1512	0.33
2011	1464	12	1476	1.00
2012	1467	22	1489	1.83
2013	1516	48	1564	4.00
2014	1708	81	1789	6.75
2015	1699	100	1799	8.33
2016	1706	179	1885	14.92
2017	1756	237	1993	19.75
2018	1793	323	2116	26.92
2019	1860	315	2175	26.25
	17958	1333	19291	

In 11 session's time, the number of AES candidates was increased by roughly 26 times in comparison with the first session in 2009.

## **Evolution of the AES candidates**



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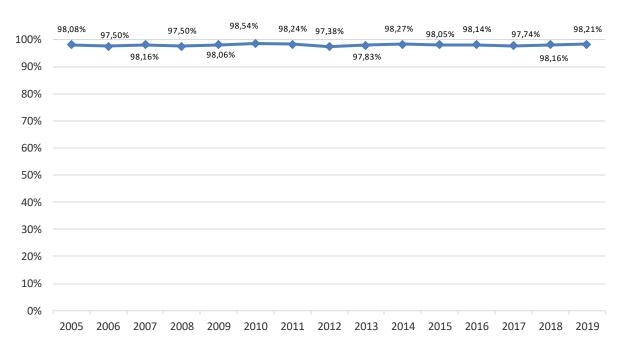
# 6. General Results of the European Baccalaureate 2019 session

EB session 2019 – participants				
Registered	2198			
Abandoned	23			
Participated	2175			
Passed	2136			
Failed	39			
Success rate	98.21%			
Fail rate	1.79%			

European Baccalaureate 2019 – Averages				
Overall Average for the Preliminary Mark	80.44			
Overall Average for Written Examinations	75.17			
Overall Average for Oral Examinations	82.09			
Overall Average for the Final Mark	78.84			

# 6.1. Success rate over the last 15 years





A comparison of success rates over the last 15 years shows that the European Baccalaureate situation stays stable.

As from session 2005, the variation in success rate never went over  $\pm$  0.7, with a general average over the 15 last sessions of 97.99%.

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# Success rate EB session 2019

Туре	School	Number of pupils	Succeeded	Failed	Success rate
ES	Bergen	30	30	0	100.00%
AES	Brindisi	25	25	0	100.00%
AES	Culham	32	32	0	100.00%
AES	Den Haag	20	20	0	100.00%
ES	Frankfurt	84	84	0	100.00%
AES	Helsinki	19	19	0	100.00%
ES	Karlsruhe	69	69	0	100.00%
AES	Manosque	19	19	0	100.00%
AES	Parma	31	31	0	100.00%
AES	Strasbourg	55	55	0	100.00%
AES	Tallinn	7	7	0	100.00%
ES	Bruxelles II	245	243	2	99.18%
ES	Varese	108	107	1	99.07%
ES	Bruxelles III	206	204	2	99.03%
ES	Alicante	75	74	1	98.67%
ES	Luxembourg I	185	182	3	98.38%
AES	RheinMain	100	98	2	98.00%
ES	Bruxelles I	269	263	6	97.77%
ES	Mol	73	71	2	97.26%
ES	München	174	169	5	97.13%
ES	Bruxelles IV	189	183	6	96.83%
ES	Mamer	153	145	8	94.77%
AES	Heraklion	7	6	1	85.71%
		2175	2136	39	98.21%

# Success rate per type of school:

Туре	Number of candidates	%	Succeeded	Failed	Success rate
ES	1860	85,52%	1824	36	98.06%
AES	315	14,48%	312	3	99.05%
	2175	100,00%	2136	39	98.21%

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# Success rate by language section

The following table shows the success rate in the different language sections. This year, the success rates by language section ranged between 96.61% and 100.00%.

Due to small numbers of bachelors in some sections, the results are not always statistically comparable.

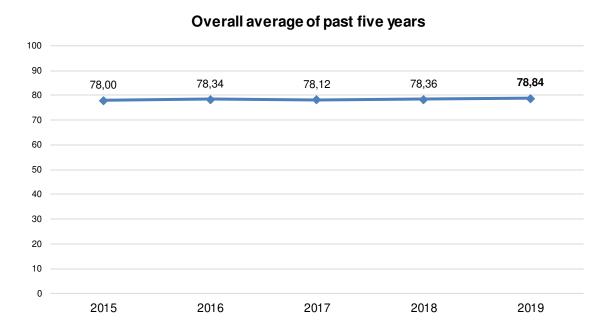
Ling. Section	Number of candidates	% candidates	Average of Final grade	Failed	Succeeded	Success rate	Schools involved
CS	10	0.46%	82.22	0	10	100.00%	1
DA	40	1.84%	82.36	0	40	100.00%	2
DE	393	18.07%	79.02	8	385	97.96%	15
EL	45	2.07%	82.50	0	45	100.00%	3
EN	555	25.52%	80.44	4	551	99.28%	23
ES	117	5.38%	76.92	3	114	97.44%	4
FI	53	2.44%	79.52	0	53	100.00%	3
FR	501	23.03%	76.31	17	484	96.61%	17
HU	14	0.64%	82.50	0	14	100.00%	1
IT	218	10.02%	79.70	5	213	97.71%	9
NL	121	5.56%	75.69	2	119	98.35%	8
PL	19	0.87%	81.05	0	19	100.00%	2
PT	45	2.07%	79.95	0	45 100.00%		2
SV	44	2.02%	84.31	0	44	100.00%	2
	2175	100.00%	78.85	39	2136	98.21%	

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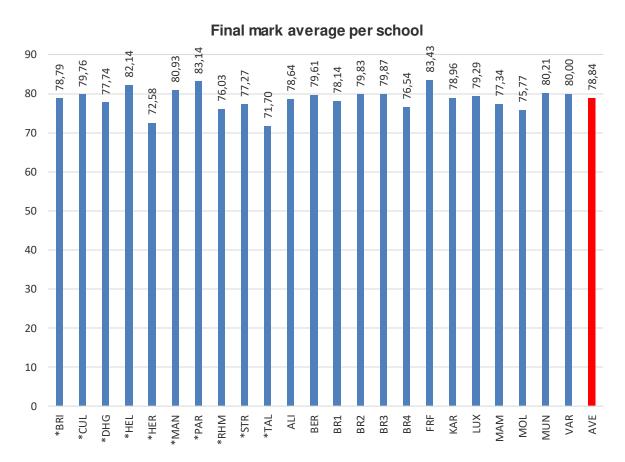
# 6.2. Final marks and averages

The final overall European Baccalaureate mark is expressed out of one hundred (100) points and is accurate to two decimal places.

For all the candidates who participated in the 2019 session of the European Baccalaureate, the average Final Mark amounted to 78.84.

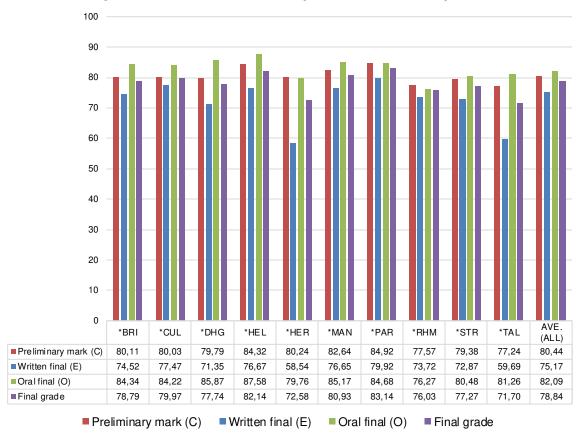


This year the average Final Mark ranged between 71.70 and 83.43 throughout schools:

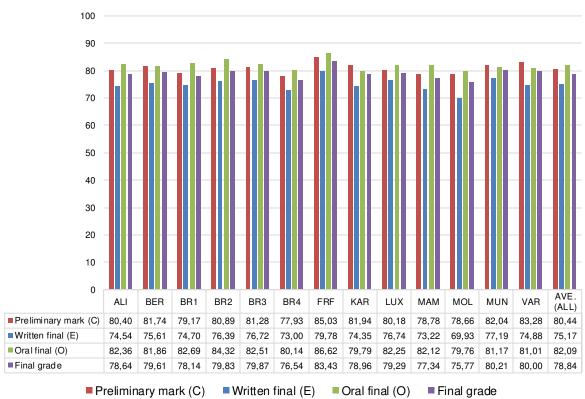


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## Average Marks C, W, O and Final - per Accredited European School



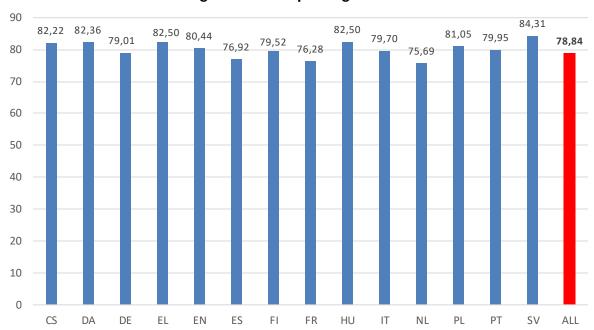
# Average Marks C, W, O and Final - per European School



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Throughout the Language Sections the average Final Mark ranged between 75.69 and 84.31. Small number of candidates in certain sections does not allow the average to be regarded as statistically significant.

# Average Final Mark per linguistic section

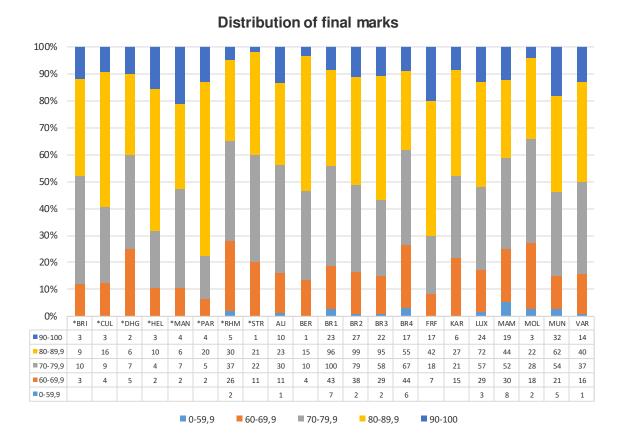


# Number of candidates per linguistic section

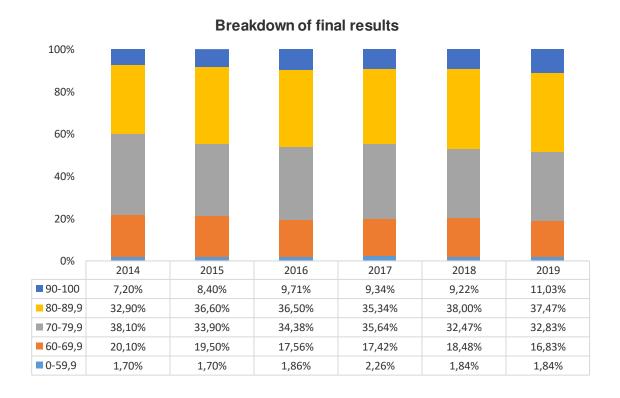
CS	DA	DE	EL	EN	ES	F	FR	HU	IT	NL	PL	PT	sv	ALL
10	40	393	45	555	117	53	501	14	218	121	19	45	44	2175

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The following table shows the distribution of Final Marks, in %, in the different schools1:



# Breakdown of final results throughout the past five years



<sup>&</sup>lt;sup>1</sup> Schools with less than 10 candidates are not shown in the graph because do not provide relevant statistical information.

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## 6.3. The Preliminary Marks

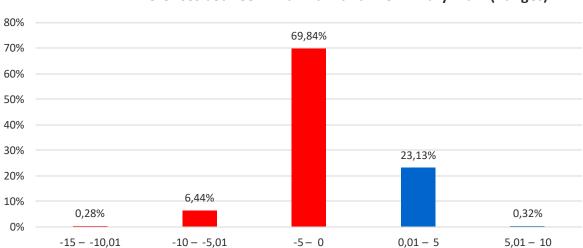
The preliminary mark (C mark) is made up of the following:

- Class marks (A marks): They will account for 20 marks out of 50
- Part examination marks (B marks): They will account for 30 marks out of 50.

## 6.3.1. Preliminary marks and Final marks

The graph below shows **differences between the Final Mark and the Preliminary Mark** for all pupils who took the European Baccalaureate. A negative difference means that the Preliminary Mark is higher than the Final Mark, and vice-versa.

76.65% of the candidates got a higher or equal Preliminary Mark as compared to their Final Mark. However, in 69.97% of the cases the difference was not greater than 5 points. For 99.40% of the candidates, the difference between the Preliminary Mark and Final Mark shows deviation of +/- 5 points out of 100.



Differences between Final Mark and Preliminary Mark (Ranges)

Preliminary Mark is higher or equal (76.55%) Preliminary Mark is lower (23.45%)

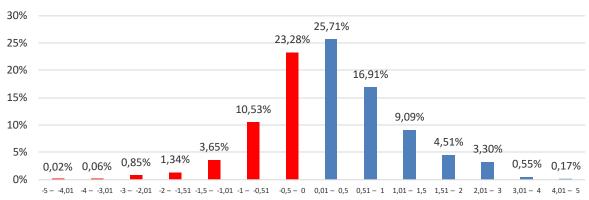
Outcome of: Final mark - Preliminary mark:	Candidates
Between -15 and -10,01 points	6
Between -10 and -5,01 points	140
Between -5 and -0,01 points	1518
Exactly 0 points	1
Between 0,01 and 5 points	503
Between 5,01 and 10 points	7
	2175

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## 6.3.2. Differences between Preliminary Mark and First Correction

The marks considered in this section only concern the marks given by the teacher.





The teacher's written exam mark is higher or equal than the Preliminary one (39.73%)

The Preliminary mark is higher or equal than the teacher's written exam mark (60.27%)

Outcome of: Preliminary mark – 1 <sup>st</sup> correction:	Examinations
Between -5 and -4,01 points	2
Between -4 and -3,01 points	6
Between -3 and -2,01 points	92
Between -2 and -1,51 points	146
Between -1,50 and -1,01 points	397
Between -1 and -0,51 points	1145
Between -0,50 and -0,01 points	2393
Exactly 0 points	139
Between 0,01 and 0,50 points	2796
Between 0,51 and 1 point	1839
Between 1,01 and 1,50 points	988
Between 1,51 and 2 points	491
Between 2,01 and 3 points	359
Between 3,01 and 4 points	60
Between 4,01 and 5 points	18
Between 5,01 and 6 points	2
Between 6,01 and 7 points	1
Between 7,01 and 8 points	1
	10875 <sup>2</sup>

It can be observed here that the variation of marks is greater. For around 49% of the cases, the variation is  $\pm$  0.5 points and for around 76% of the cases the variation is  $\pm$  1 point<sup>3</sup>.

Around 40% of the candidates received higher marks from their teachers in the written examinations as compared to the preliminary mark. In 1.28% of the cases, the candidate obtained the exact same mark at both Preliminary and first marks written examination.

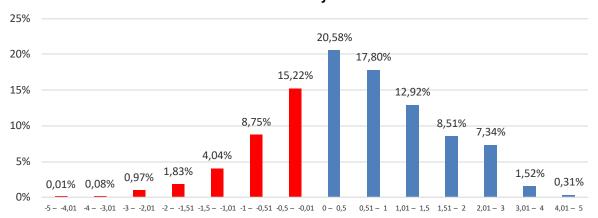
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<sup>&</sup>lt;sup>2</sup> We do not take into account Additional Examinations because not all these examinations had a preliminary mark.

<sup>&</sup>lt;sup>3</sup> Points calculated out of 10 points.

# 6.3.3. Differences between Preliminary Mark and Second Correction

## Differences between Preliminary Mark and 2nd correction



Second examiner gave a higher mark than the Preliminary mark (30.91%)

Preliminary mark is higher or equal than the second examiner's mark (69.09%)

Outcome of: Preliminary mark – 2 <sup>nd</sup> correction:	Examinations
Between -5 and -4,01 points	1
Between -4 and -3,01 points	9
Between -3 and -2,01 points	106
Between -2 and -1,51 points	199
Between -1,50 and -1,01 points	439
Between -1 and -0,51 points	952
Between -0,50 and -0,01 points	1588
Exactly 0 points	67
Between 0,01 and 0,50 points	2238
Between 0,51 and 1 point	1936
Between 1,01 and 1,50 points	1405
Between 1,51 and 2 points	926
Between 2,01 and 3 points	798
Between 3,01 and 4 points	165
Between 4,01 and 5 points	34
Between 5,01 and 6 points	8
Between 6,01 and 7 points	3
Between 7,01 and 8 points	1
	10875 <sup>4</sup>

It can be observed here as well that the variation of marks is large. For around 36% of the cases, the variation is  $\pm$ 0.5 and for around 62% of the cases the variation is  $\pm$ 1.

Around 31% of the pupils receive higher marks from the second examiners in the written examinations as compared to the preliminary mark.

In 0.62% of the cases, the pupils obtained the exact same mark at both Preliminary and external examiners' written examination marks.

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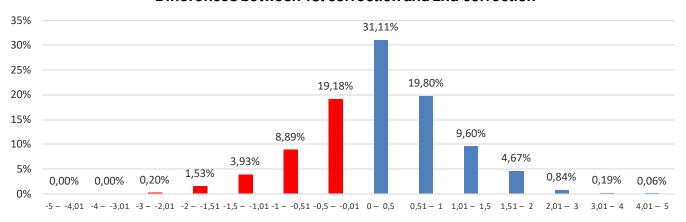
<sup>&</sup>lt;sup>4</sup> We do not take into account Additional Examinations because not all these examinations had a preliminary mark.

### 6.4. The Written Correction Marks

## 6.4.1. Differences between First Correction and Second Correction

62.39% of candidates received a higher mark from their first corrector, the teacher.

#### Differences between 1st correction and 2nd correction



Second examiner gave a higher mark for the examination (29.88%)

Teacher gave a higher or equal mark for the examination (70.12%)

Outcome of: 1st correction - 2nd correction:	Examinations
Between -3 and -2,01 points	22
Between -2 and -1,51 points	167
Between -1,50 and -1,01 points	428
Between -1 and -0,51 points	968
Between -0,50 and -0,01 points	1669
Exactly 0 points	419
Between 0,01 and 0,50 points	3388
Between 0,51 and 1 point	2156
Between 1,01 and 1,50 points	1045
Between 1,51 and 2 points	508
Between 2,01 and 3 points	91
Between 3,01 and 4 points	21
Between 4,01 and 5 points	6
Between 5,01 and 6 points	1
	10889

136 third corrections had thus to be performed.

- Written mark #3 Written mark #1 = average of -1.20 points
- Written mark #3 Written mark #2 = average of +0.76 points

In 3.85% of the cases, the candidates obtained the exact same marks at both teacher and external examiner's written examination correction.

It can also be said that:

In 50.29% of the cases, the candidates achieved a mark, first and second correction, with a variation of +/- 0.5 point.

In 78.98% of the cases, the candidates achieved a mark, first and second correction, with a variation of +/- 1 point.

In 92.51% of the cases, the candidates achieved a mark, first and second correction, with a variation of +/- 1.5 points.

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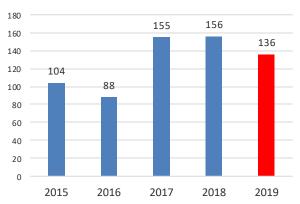
## 6.4.2. Third corrections

Out of 10889 scripts, 136 scripts were submitted to a third correction, i.e. 1.25% of the total scripts corrected.

The tables below indicate the distribution of the 136 third corrections, per school and per subject, with the detail of the language.

School	3rd corrections performed	Total scripts	%
*BRI	6	125	4.80%
*CUL	6	160	3.75%
*DHG	1	100	1.00%
*HEL	3	95	3.16%
*HER	2	35	5.71%
*MAN	0	96	0.00%
*PAR	0	155	0.00%
*RHM	6	500	1.20%
*STR	1	275	0.36%
*TAL	2	35	5.71%
ALI	6	375	1.60%
BER	3	150	2.00%
BR1	14	1345	1.04%
BR2	4	1230	0.33%
BR3	3	1032	0.29%
BR4	7	946	0.74%
FRF	4	421	0.95%
KAR	14	345	4.06%
LUX	10	926	1.08%
MAM	8	766	1.04%
MOL	11	367	3.00%
MUN	14	870	1.61%
VAR	11	540	2.04%
TOTAL	136	10889	1.25%

# Evolution of third corrections EB sessions 2015-2019

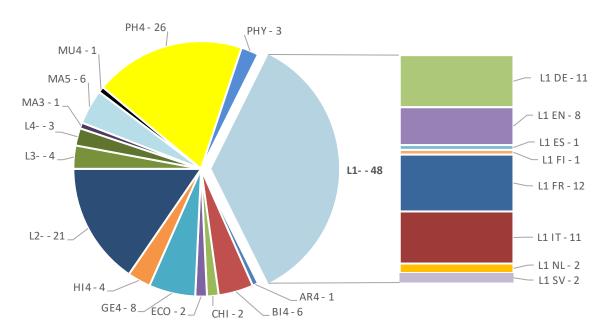


Subject	Languages	Total scripts	3rd correct	%
AR4	EN (1)	291	1	0.34%
BI4	ES (5), DE (1)	514	6	1.17%
CHI	EN (2)	554	2	0.36%
ECO	EN (2)	461	2	0.43%
GE4	EN (5), DE (3)	293	8	2.73%
GRE	-	3	0	0.00%
HI4	EN (3), FR (1)	424	4	0.94%
L1-	DE (11), EN (8), ES (1), FI (1), FR (12), IT (11), NL (2), SV (2)	2070	48	2.32%
L1A	-	105	0	0.00%
L2-	DE (4), EN (6), FR (11)	2003	21	1.05%
L2A	-	172	0	0.00%
L3-	DE (4)	689	4	0.58%
L4-	FR (2), SV (1)	278	3	1.08%
LAT	-	5	0	0.00%
MA3	FR (1)	1187	1	0.08%
MA5	DE (1), EL (1), EN (2), ES (1), FR (1)	988	6	0.61%
MU4	EN (1)	38	1	2.63%
ONL	-	1	0	0.00%
PH4	DE (8), EN (13), ES (1), FR (2), NL (2)	229	26	11.35 %
PHY	EN (2), IT (1)	584	3	0.51%
Total		10889	136	1.25%

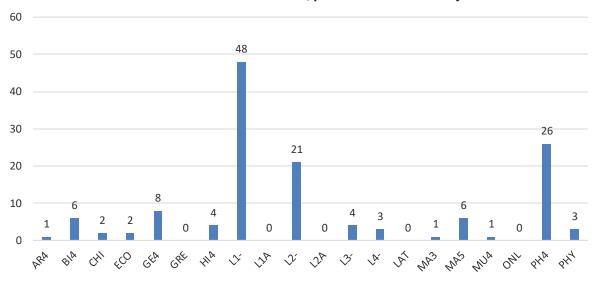
In 2019 there was a significant decrease (20) of the amount of third corrections, despite a bigger number of scripts in comparison to EB 2019, which means a decrease of 12.82% less of third corrections.

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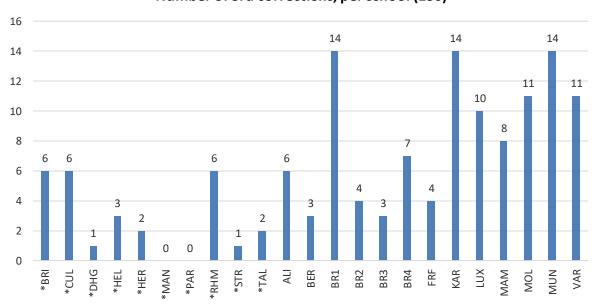
# Distribution of the 136 third corrections BACC 2019



# Number of 3rd corrections, per examination subject



## Number of 3rd corrections, per school (136)



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## 6.4.3. Marks disagreement

A written examination script is deemed successful for the pupil if it was granted at least the minimum mark of 6 out of 10 (pass mark).

Marks disagreement designates the very specific case occurring when, for a <u>same</u> script, one examiner considers the script as being in line with the correction criteria pass mark, whereas the other examiner judges it as insufficient and not in compliance with the pass mark criteria.

When comparing the written examination marks given by the teachers / first correctors, and external examiners / second correctors, for the 10889 scripts of the EB session 2019, the following can be observed:

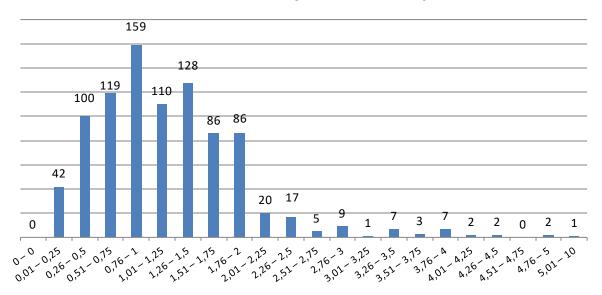
	Number of scripts		Third corrections involved				
	number of scripts	%	number of scripts	%			
Teacher gave 6 or more	9489	87.14%	118	1.24%			
External Examiner gave 6 or more	9130	83.85%	59	0.65%			
Teacher gave 5,99 or less	1401	12.87%	18	1.28%			
External Examiner gave 5,99 or less	1759	16.15%	77	4.38%			
					Average W1	Average W2	Average W3
Teacher passed the script, external examiner failed the script	632	5.80%	67	10.60%	6.64	5.33	5.93
Teacher failed the script, external examiner passed the script	274	2.52%	8	2.92%	5.46	6.48	6.28

For 906 scripts, i.e. 8.32% of the total scripts, a mark disagreement was observed during last session.

In 75 cases the difference between the two marks was higher than 2 marks, meaning that 8.28% of the 906 disputed scripts were thus submitted to a third correction.

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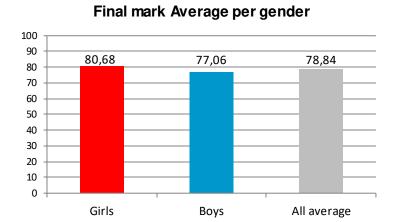
# Absolute value of difference between first and second correction for mark disagreement (906 scripts)

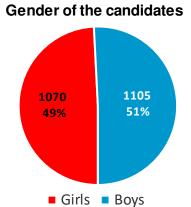


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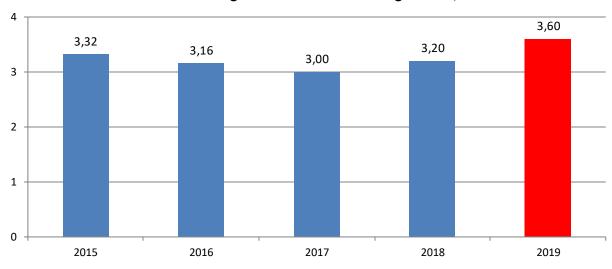
#### 6.5. Gender differences

Female candidates score a higher final mark than the general average, as it can be observed in this graph.



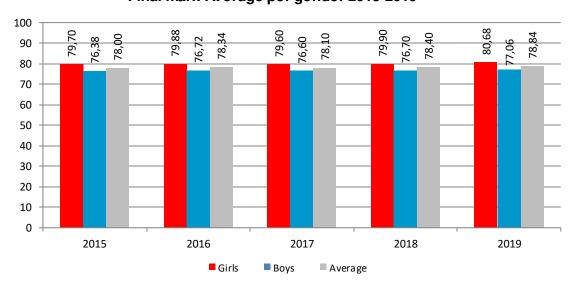


### Difference in average final marks between genders, 2015-2019



This is a general trend in the last 5 years:

### Final mark Average per gender 2015-2019

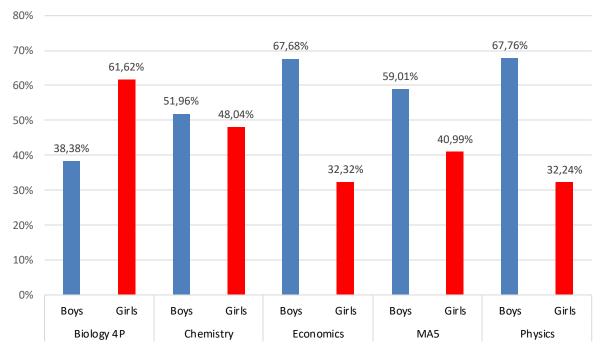


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Here below, the choices of options and written average, per gender:

Science Subjects	Gender	Number of candidates	Written Average	Percentage
	Boys	246	6.79	38.38%
Biology 4P	Girls	395	7.08	61.62%
	Total	641	6.97	
	Boys	318	7.31	51.96%
Chemistry	Girls	294	7.84	48.04%
	Total	612	7.56	
	Boys	312	7.02	67.68%
Economics	Girls	149	7.32	32.32%
	Total	461	7.12	
	Boys	583	6.85	59.01%
MA5	Girls	405	7.14	40.99%
	Total	988	6.97	
	Boys	412	7.59	67.76%
Physics	Girls	196	7.80	32.24%
	Total	608	7.66	

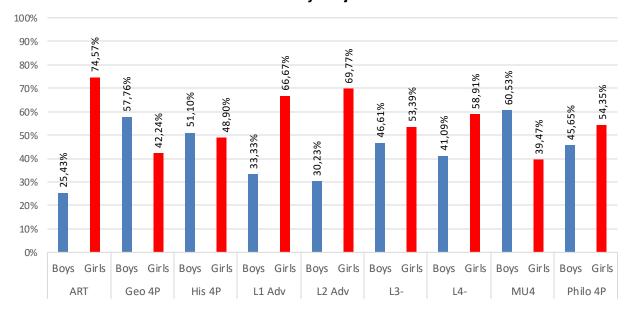
# Science subjects



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Literary Subjects	Gender	Number of candidates	Written Average	Percentage
	Boys	74	8.07	25.43%
ART	Girls	217	8.48	74.57%
	Total	291	8.38	
	Boys	201	7.25	57.76%
Geography 4P	Girls	147	7.24	42.24%
	Total	348	7.24	
	Boys	233	7.00	51.10%
History 4P	Girls	223	7.42	48.90%
	Total	456	7.21	
	Boys	35	7.85	33.33%
L1 Adv	Girls	70	8.25	66.67%
	Total	105	8.11	
	Boys	52	8.19	30.23%
L2 Adv	Girls	120	8.24	69.77%
	Total	172	8.22	
	Boys	412	8.07	46.61%
L3-	Girls	472	8.22	53.39%
	Total	884	8.15	
	Boys	136	7.91	41.09%
L4-	Girls	195	8.24	58.91%
	Total	331	8.11	
	Boys	23	6.63	60.53%
MU4	Girls	15	7.66	39.47%
	Total	38	7.03	
	Boys	173	7.60	45.65%
Philo 4P	Girls	206	7.96	54.35%
	Total	379	7.79	

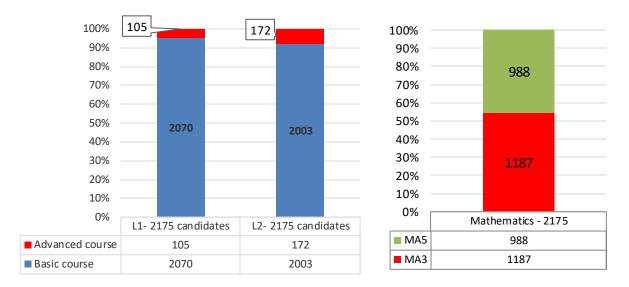
# Literary subjects



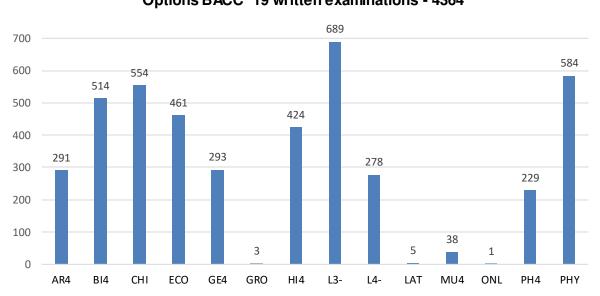
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# 6.6. European Baccalaureate examinations and most popular written and oral examination options

Compulsory Written examinations - 2175 candidates



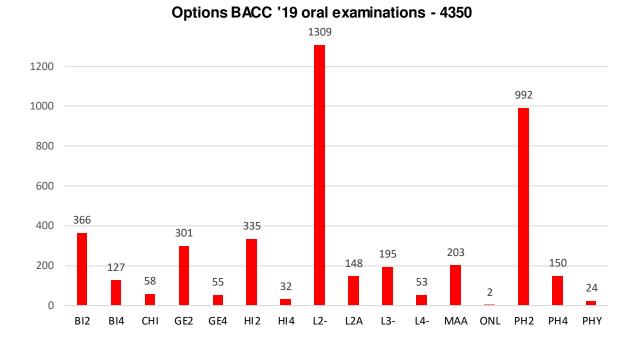
Options written examinations: 4364 scripts (2175 x 2 options = 4350 + 14 add. exams)



Options BACC '19 written examinations - 4364

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### Options oral examinations: 4350 orals ( $2175 \times 2 = 4350$ oral examinations)

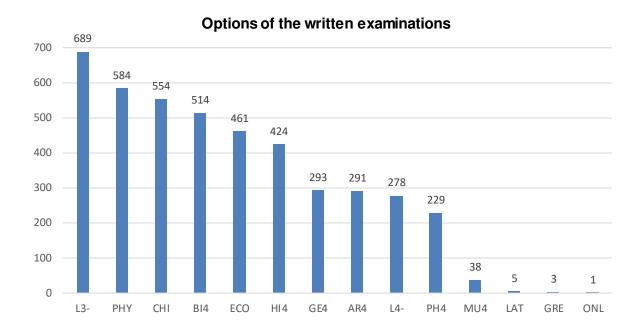


### 6.6.1. Most popular written choices

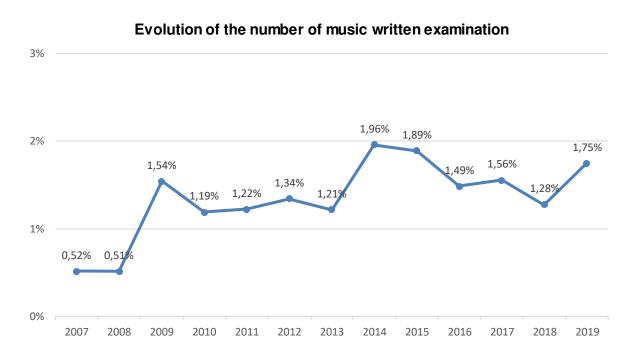
The five most chosen options for the written examinations this year were: Language III (English LIII being the most popular choice: 232 candidates), Physics, Chemistry, Biology and Economics.

Options of written examinations	Number of candidates BAC 2017	Percentage of candidates BAC 2017	Number of candidates BAC 2018	Percentage of candidates BAC 2018	Number of candidates BAC 2019	Percentage of candidates BAC 2019
LANGUAGE III	641	32.15%	673	31.81%	689	31.68%
PHYSICS	505	25.33%	574	27.13%	584	26.85%
CHEMISTRY	464	23.27%	564	26.65%	554	25.47%
BIOLOGY 4	517	25.93%	537	25.38%	514	23.63%
ECONOMICS	378	18.96%	393	18.57%	461	21.20%

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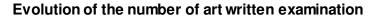
Art and Music are among less popular written examinations. Nevertheless, the number of written examinations in Musical education and Art increases slightly compared to previous years.

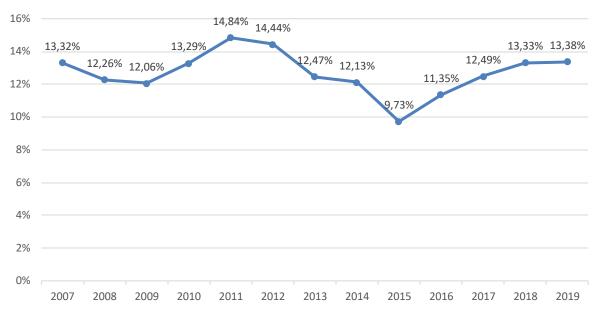


Number of candidates per year who chose the music written examinations:

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
7	7	23	18	18	20	19	35	34	28	31	27	38

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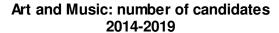


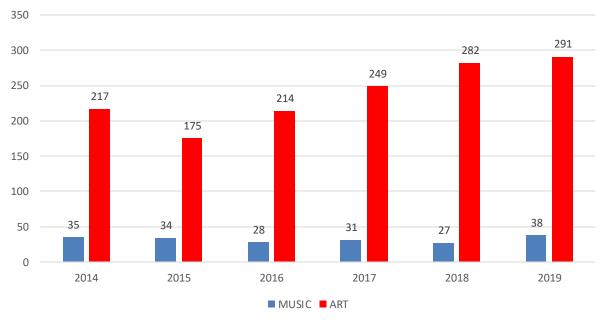


Number of candidates per year who chose the art written examinations:

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
181	167	180	201	219	215	195	217	175	214	249	282	291

Music Education and Art candidates are in keep roughly the same rhythm throughout the years, as can be seen in the graph below. It can be remarked that the number of candidates who choose Art is growing gradually.

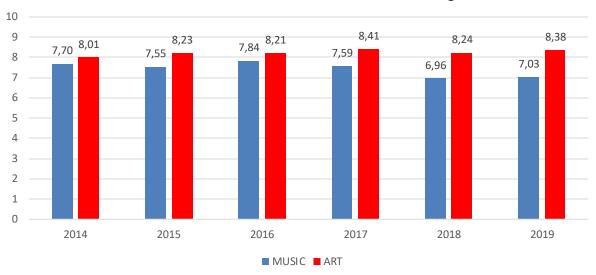




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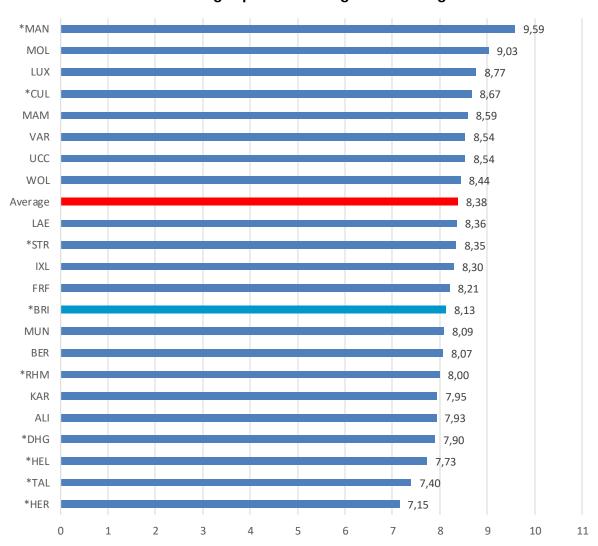
The averages in these disciplines are generally increasing. They tend to show that pupils choose the subjects out of passion, talent and competence, not just by mere curiosity or simple need to complete their schedule.





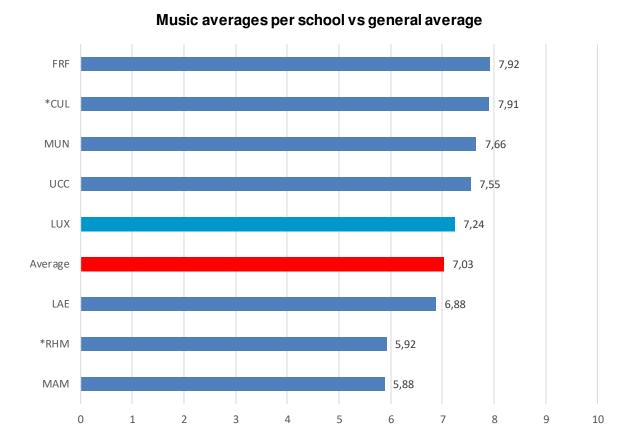
General average in Art at the 2019 European Baccalaureate, per school: 8.38.

### Art averages per school vs general average

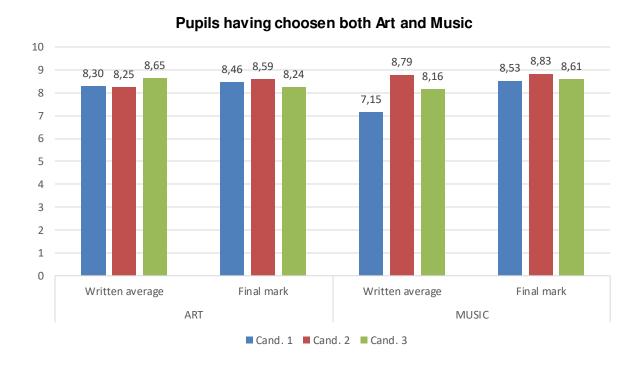


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General average in Music at the 2019 European Baccalaureate, per school: 7.03.



3 candidates took both Art and Music examination. 3 girls: 1 from ES BR 4, 1 from ES MUN and 1 from AES CUL.



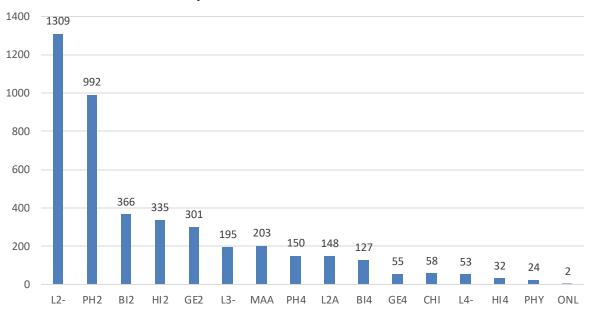
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### 6.6.2. Most popular oral choices

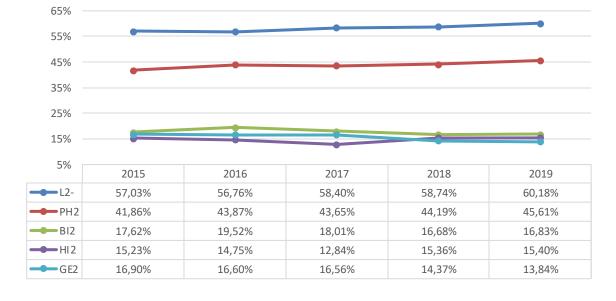
The five most widely chosen options for the oral examinations in 2019 were: Language II (English: 910), Philosophy 2, Biology 2, History 2 and Geography 2.

Options of oral examinations	Number of candidates BAC 2017	Percentage of candidates BAC 2017	Number of candidates BAC 2018	Percentage of candidates BAC 2018	Number of candidates BAC 2019	Percentage of candidates BAC 2019
LANGUAGE II	1164	58.40%	1243	58.74%	1309	60.18%
PHILOSOPHY 2	870	43.65%	935	44.19%	992	45.61%
BIOLOGY 2	359	18.01%	353	16.67%	366	16.83%
HISTORY 2	256	12.84%	325	15.36%	335	15.40%
GEOGRAPHY 2	330	16.56%	304	14.37%	301	13.84%

### Options of the oral examinations



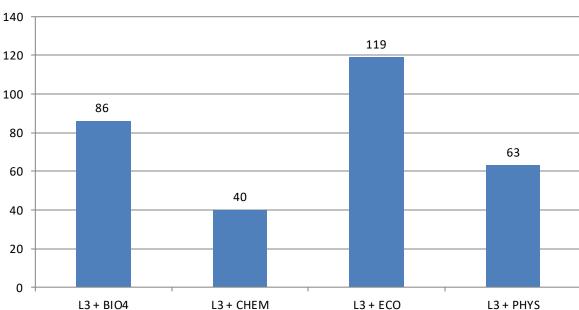
#### **Oral candidates evolution**



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#### 6.6.3. Combination L3 - Sciences

689 candidates took a written examination in Language III. Out of these, 308 combined this examination with an examination in one scientific subject. Only 1 pupil combined L3 with 2 scientific subjects (Economy and Physics). In this graph we can see a frequency of combination:



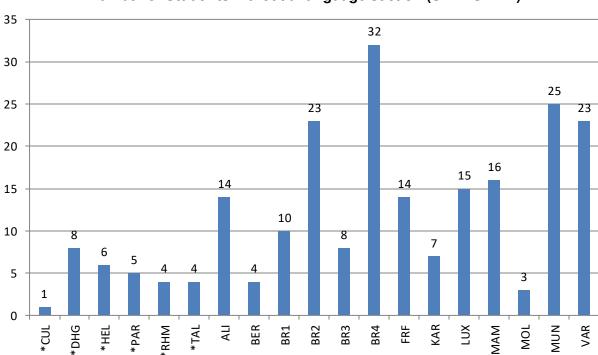
Frequency of combination L3 (689 cands.) + Scientific subject

The graph shows that candidates with language orientation are also interested in mastering sciences in line with European key competences for lifelong learning.

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# 6.7. Students Without A Language Section (SWALS)

This year, 222 Students Without A Language Section registered for the European Baccalaureate session.

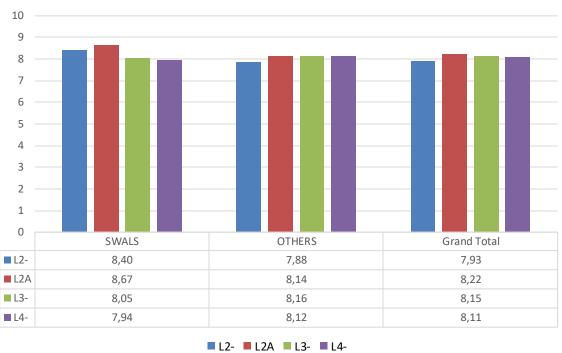


### Number of Students without a language section (SWALS: 222)

The average Final Mark achieved by SWALS candidates this year has been of 80.90. 2 SWALS candidates failed.

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In the following graph are shown their performance in Languages II, II Adv, III and IV. It can be observed that their performance in L2 and L2 Adv is higher than the average, a little bit less than the average in LIII and a little bit less in LIV.



**SWALS: Final written examination mark in Languages** 

Here are some results of the SWALS pupils in comparison with the other pupils and the general average. Results where SWALS averages are higher than NO SWALS, are highlighted.

	AR4	GE4	GRE	HI4	LAT	MU4	PH4
SWALS	8.24	7.66	6.75	7.27	9.00	6.13	8.04
NO SWALS	8.39	7.20		7.21	7.45	7.24	7.76
ALL	8.38	7.24	6.75	7.21	7.76	7.03	7.79

	BI4	CHI	ECO	MA3	MA5	PHY
SWALS	7.14	7.72	7.14	7.10	7.08	7.55
NO SWALS	6.95	7.54	7.12	6.82	6.95	7.67
ALL	6.97	7.56	7.12	6.85	6.97	7.65

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# 7. Results about the Sciences: Biology, Chemistry, Economic Sciences, Mathematics, and Physics

### 7.1. Final Marks for Science Classes

(Final Mark per subject: 0.50 C + 0.35 W + 0.15 O)

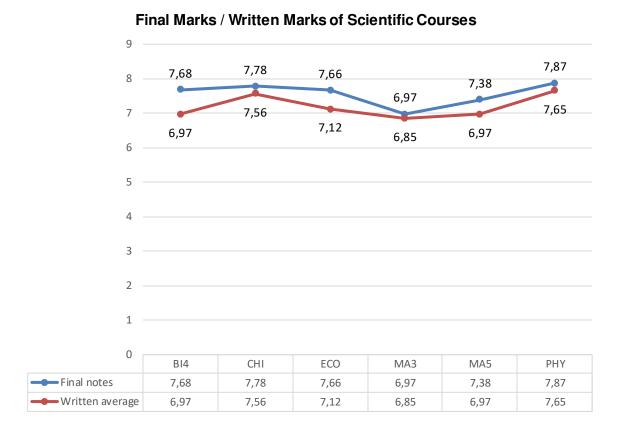
The evolution of the average Final Mark (Marks C + W + O) for the science classes shows substantial stability over the years.

		Final m	nark ave	rage for s	science d	classes		
	BI2	MAA	PHY					
2013	7.58	7.52	7.37		6.70	7.13	8.26	7.25
2014	7.57	7.59	7.41	7.43	6.68	7.32	8.34	7.53
2015	7.62	7.46	7.57		6.89	7.46	8.28	7.42
2016	7.59	7.47	7.50	7.56	6.93	7.26	8.31	7.48
2017	7.81	7.60	7.65	7.65	6.71	7.51	8.32	7.74
2018	7.68	7.52	7.70	7.72	6.71	7.20	8.37	7.93
2019	7.70	7.68	7.78	7.66	6.97	7.38	8.42	7.87

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### 7.2. Comparison of Final Marks / Written Marks of Scientific Courses

The graphs below show that the results in the Chemistry, Maths 3P, Maths 5P and Physics final marks do not differ much from the final written EB mark. However, the number of failures in these subjects is still considerable.

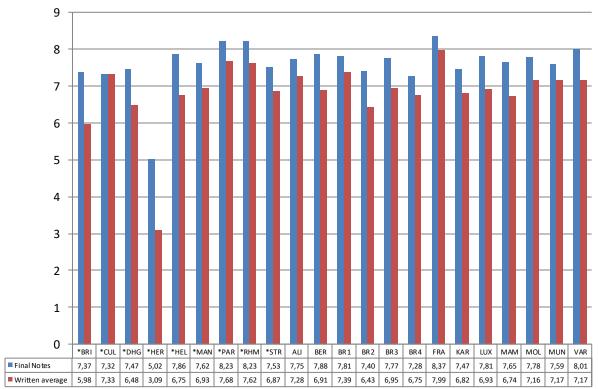


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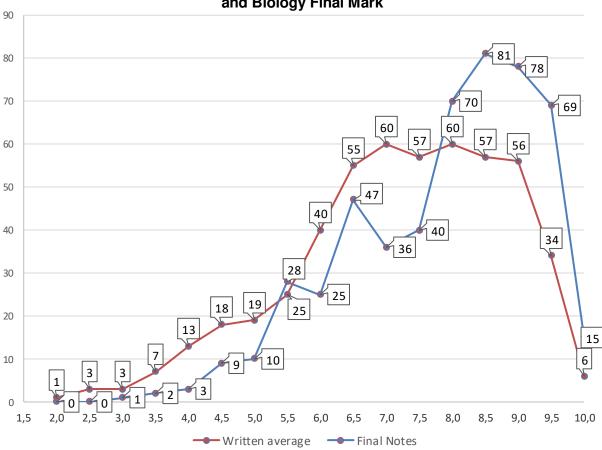
### 7.2.1. Biology Final Mark (gen average. 7.68)

Detailed results, per school:





# Comparison of Frequency of Marks between Biology Written Exam and Biology Final Mark

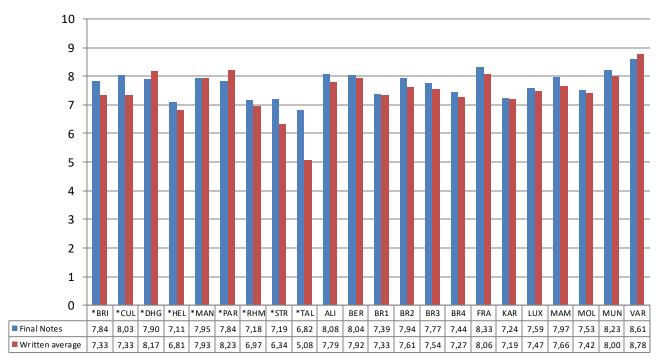


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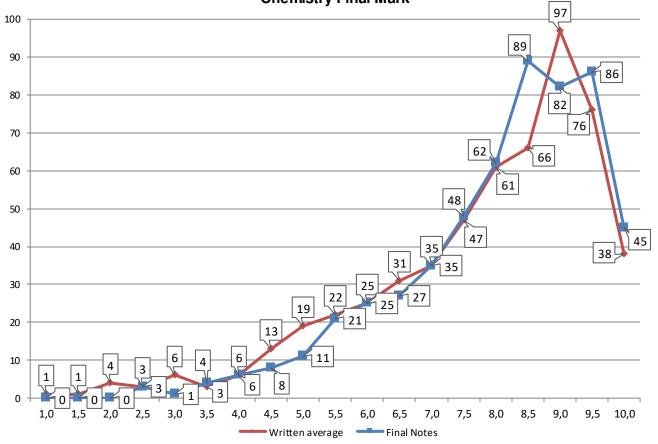
### 7.2.2. Chemistry Final Mark (gen. average. 7.78)

Detailed results, per school:

# Chemistry: Difference average Final mark - Written mark



Comparison of Frequency of Marks between Chemistry Written Exam and Chemistry Final Mark

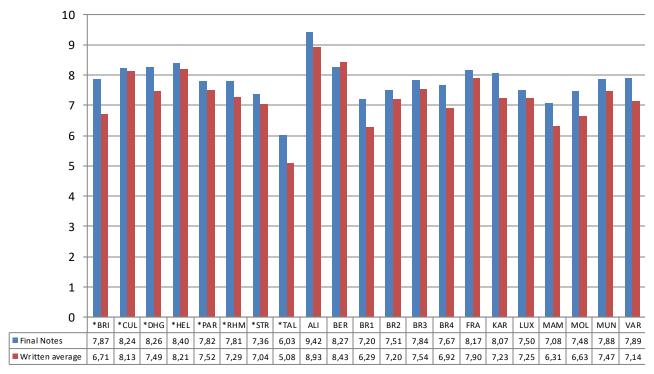


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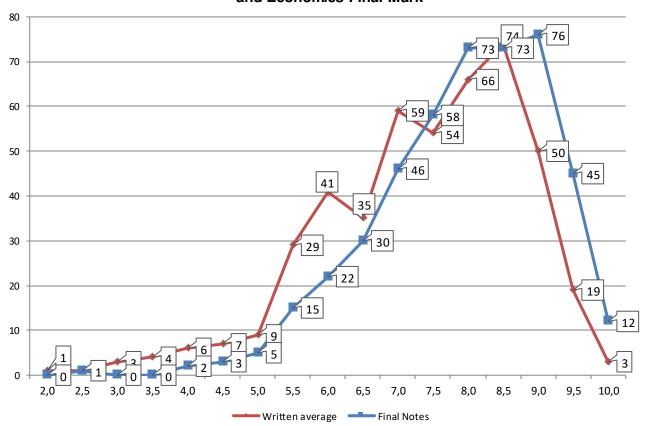
### 7.2.3. Economics Final Mark (gen. average 7.66)

Detailed results, per school:





# Comparison of Frequency of Marks between Economics Written Exam and Economics Final Mark

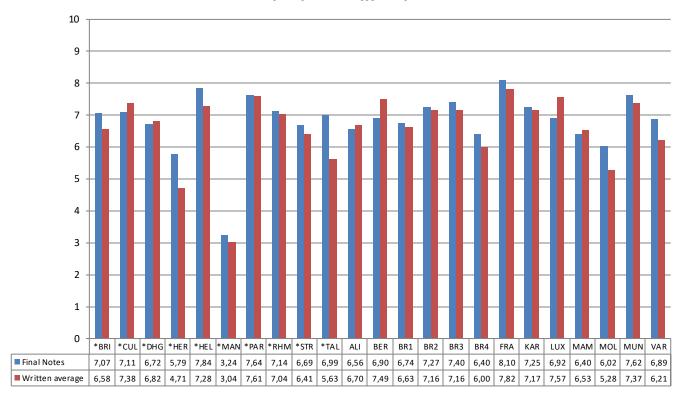


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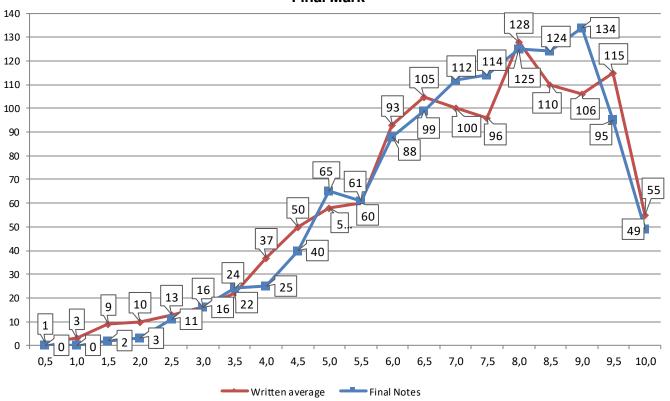
### 7.2.4. Maths 3P Final Mark (gen. average. 6.97)

Detailed results, per school:

Maths 3P: Difference average Final mark - Written mark



# Comparison of Frequency of Marks between MA3 Written Exam and MA3 Final Mark

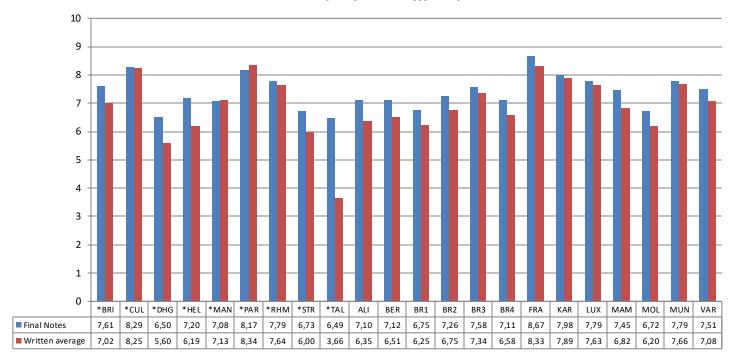


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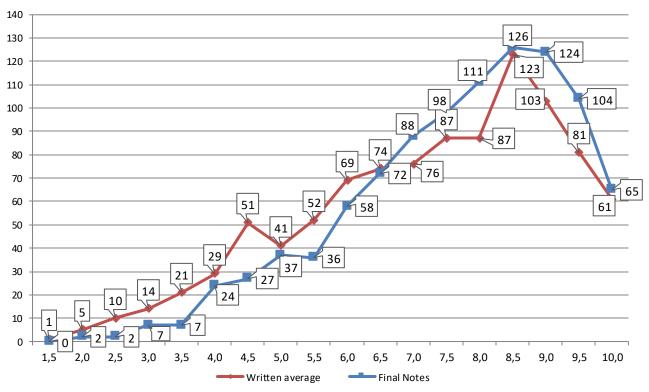
### 7.2.5. Maths 5P Final Mark (gen. average. 7.38)

Detailed results, per school:

Maths 5P: Difference average Final mark - Written mark



# Comparison of Frequency of Marks between MA5 Written Exam and MA5 Final Mark

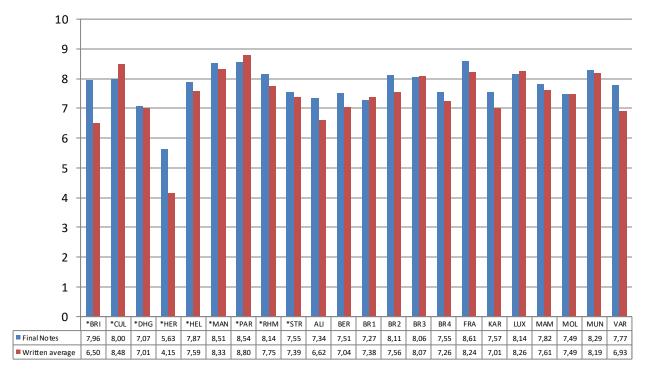


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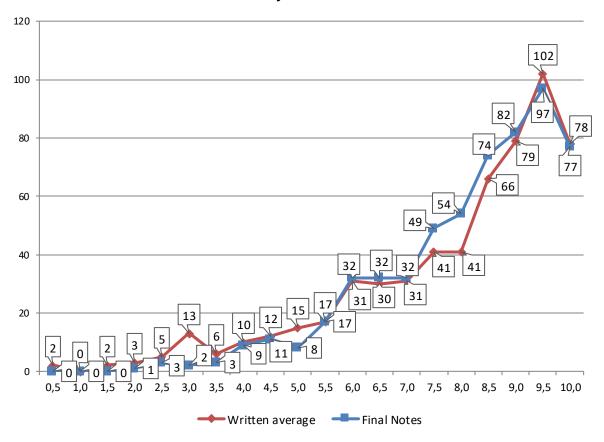
### 7.2.6. Physics Final Mark (gen. average. 7.87)

Detailed results, per school:

# Physics: Difference average Final mark - Written mark

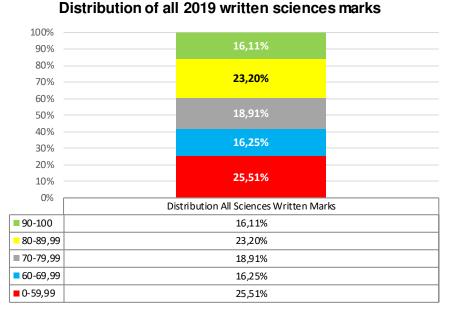


# Comparison of Frequency of Marks between Physics Written Exam and Physics Final Mark



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# 7.3. European Baccalaureate Sciences Written Examination Marks Results

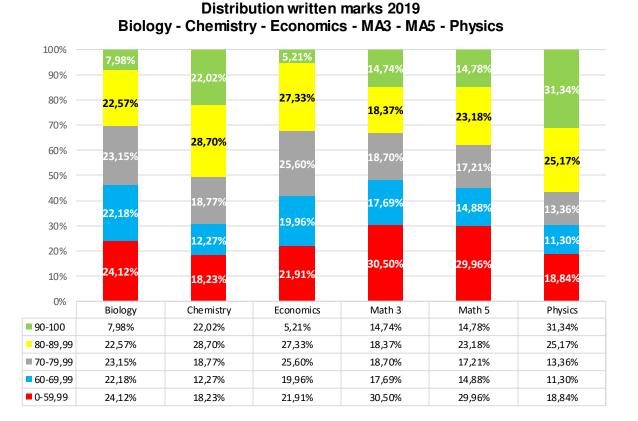


The distribution graph below indicates that for all sciences subject examinations considered, the 25.51% of the scripts did not obtain the pass mark.

The next distribution table per subject reflects the detail among the sciences subject distribution of written examination marks.

MA3 is the subject with the highest failure rate with a percentage of 30.50 of pupils not reaching the pass mark of 6.

Whereas Physics has the highest success rate with a percentage of 31.34, of pupils reaching a final written examination mark between 9 and 10.

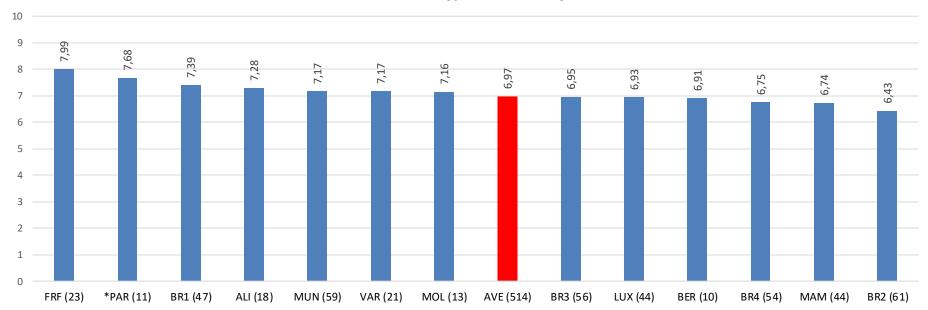


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# 7.3.1. Biology (Success rate: 75.88%)<sup>5</sup>

School year	*BRI	T∩D*	*DHG	*HEL	*HER	*MAN	*PAR	*RHM	*STR	*TAL	ALI	BER	BR 1	BR 2	BR3	BR 4	FRF	KAR	rnx	MAM	MOL	MUN	VAR	Aver.
2014/2015		7,40		5,58		7,30	6,41		5,99		6,77	6,65	7,50	7,01	7,15		6,88	7,66	7,08	6,97	6,94	6,69	7,57	7,04
2015/2016		7,25		6,00		7,48	7,33	4,78	6,14		6,69	6,43	7,23	6,53	7,13		7,60	6,57	6,80	7,33	7,50	7,01	7,84	6,97
2016/2017	3,40	6,66		6,94	5,63	5,74	6,98	5,79	5,33		6,30	6,73	7,20	7,17	6,94	6,51	7,73	6,87	7,65	6,59	7,46	6,98	7,35	6,92
2017/2018	5,54	6,12		5,19	6,34	8,37	7,97	5,64	6,23		7,41	6,31	7,75	6,64	6,69	6,66	7,76	7,52	6,45	6,33	6,59	6,22	7,49	6,76
2018/2019	5,98	7,33	6,48	6,75	3,09	6,93	7,68	7,62	6,87		7,28	6,91	7,39	6,43	6,95	6,75	7,99	6,82	6,93	6,74	7,16	7,17	7,17	6,97

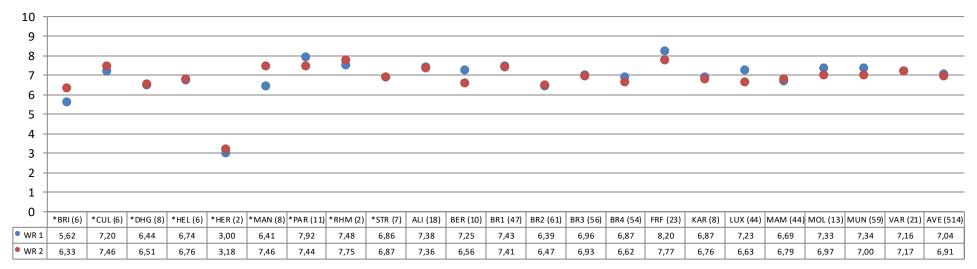
BACC 2019: Biology written average (6,97)



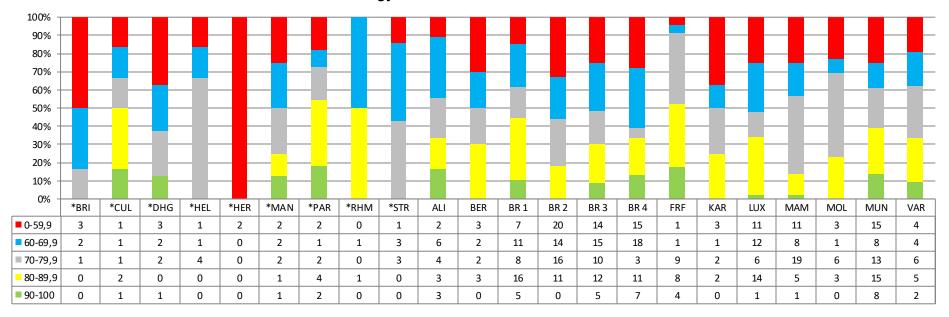
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<sup>&</sup>lt;sup>5</sup> Schools with less than 10 candidates will not be taken into consideration because they are not statistically relevant.

# Biology: comparison W1 vs W2



### Biology: distribution of written marks

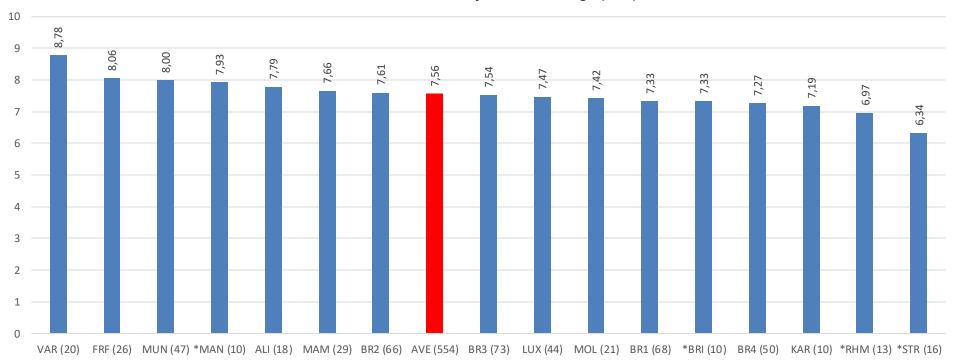


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# **7.3.2.** Chemistry (Success rate: 81.77%)

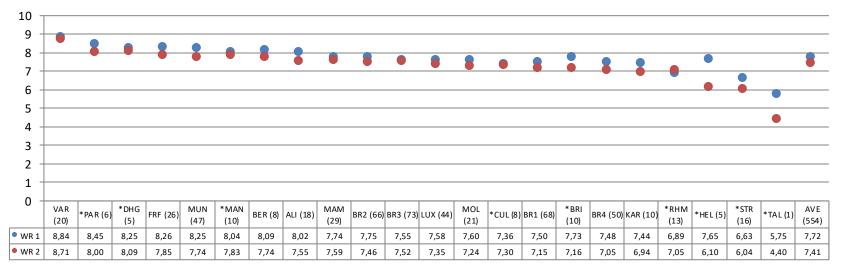
School year	*BRI	*CUL	*DHG	*HEL	*HER	*MAN	*PAR	*RHM	*STR	*TAL	ALI	BER	BR 1	BR2	BR3	BR4	FRF	KAR	TUX	MAM	MOL	MUN	VAR	Aver.
2014/2015		8,02		5,35	7,15	7,19	7,28		5,85		6,93	4,54	7,86	6,69	7,04		7,87	7,39	7,54	7,75	7,41	7,44	7,81	7,24
2015/2016		8,01		5,02	6,72	7,40	8,57	5,88	6,20		6,85	4,46	7,66	6,39	7,54		7,14	6,44	7,97	7,97	7,19	6,99	7,54	7,12
2016/2017	1,95	7,44		5,27	3,37	7,08	7,28	5,80	5,93		7,49	6,47	7,43	7,43	7,53	7,04	8,14	6,99	7,13	7,68	7,33	7,08	7,48	7,18
2017/2018	6,44	7,69				9,60	7,52	7,18	7,47	7,40	7,54	5,99	7,69	7,11	6,72	7,45	7,78	7,54	7,72	7,13	7,43	7,55	7,43	7,31
2018/2019	7,33	7,33	8,17	6,81		7,93	8,23	6,97	6,34	5,08	7,79	7,92	7,33	7,61	7,54	7,27	8,06	7,19	7,47	7,79	7,42	8,00	8,78	7,56

# BACC 2019: Chemistry written average (7,56)

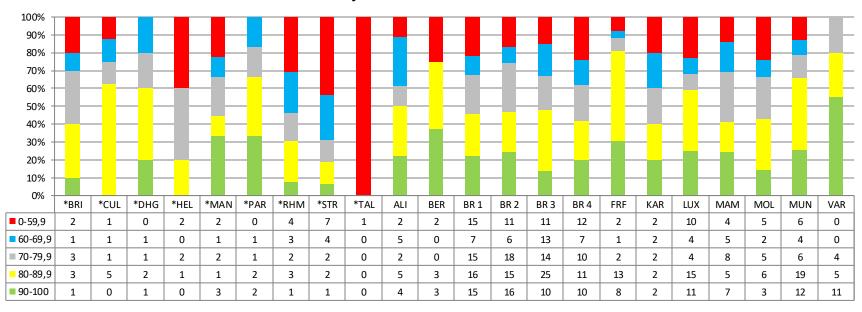


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# Chemistry: comparison W1 vs W2



### Chemistry: distribution of written marks

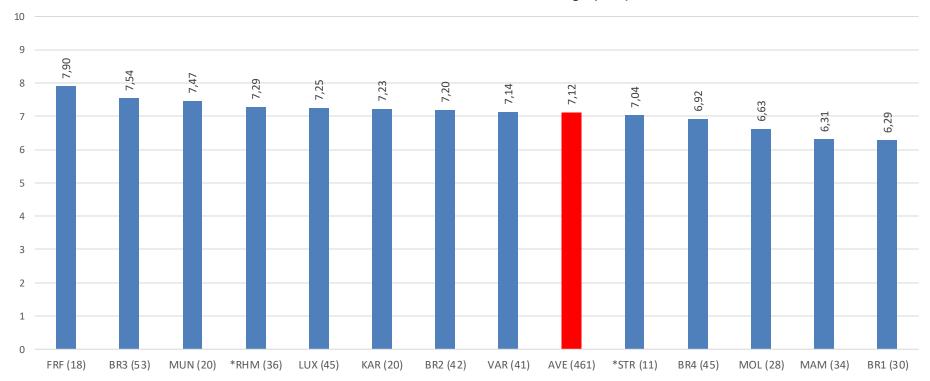


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# **7.3.3. Economics (Success rate: 78.09%)**

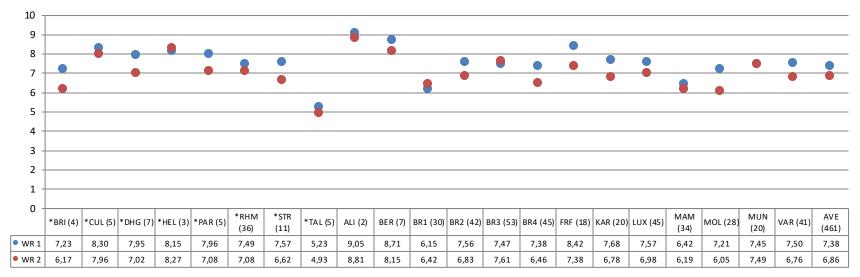
School year	*BRI	*CUL	*DHG	*HEL	*HER	*MAN	*PAR	*RHM	*STR	*TAL	ALI	BER	BR1	BR2	BR3	BR 4	FRF	KAR	LUX	MAM	MOL	MUN	VAR	Aver.
2014/2015		7,82		6,77			6,91		8,08		6,27	7,06	7,11	7,32	6,95		7,74	6,55	6,63	6,84	6,10	7,24	7,13	7,01
2015/2016		7,84					7,60	7,88	6,95		7,33	6,46	7,11	6,88	6,91		8,68	7,35	6,82	7,15	6,52	6,47	7,75	7,20
2016/2017	6,50	7,94		7,15	6,90		6,74	7,63	6,69		7,32	6,14	7,01	7,39	6,82	7,16	7,54	7,77	6,85	7,32	6,10	7,35	7,33	7,14
2017/2018	5,56	7,49		6,92			8,50	7,55	7,04	7,80	6,64	5,29	6,72	7,40	7,30	7,06	7,81	6,98	7,72	6,93	6,32	6,43	7,81	7,17
2018/2019	6,71	8,13	7,49	8,21			7,52	7,29	7,04	5,08	8,93	8,43	6,29	7,20	7,54	6,92	7,90	7,23	7,25	6,31	6,63	7,47	7,14	7,12

BACC 2019: Economics written average (7,12)

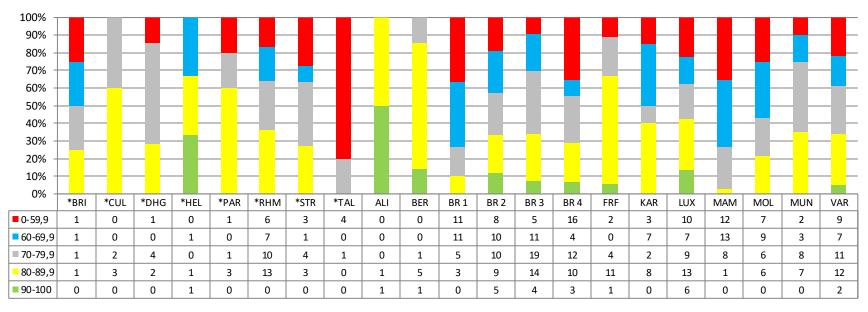


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# Economics: comparison W1 vs W2



#### **Economics: distribution of written marks**

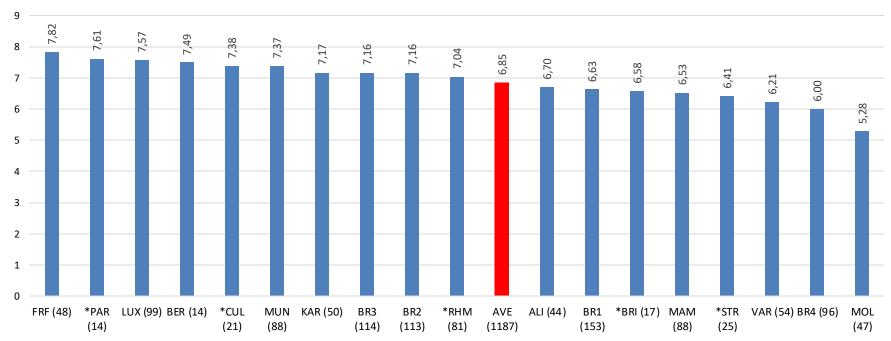


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# 7.3.4. Mathematics 3P (Success rate: 69.54%)

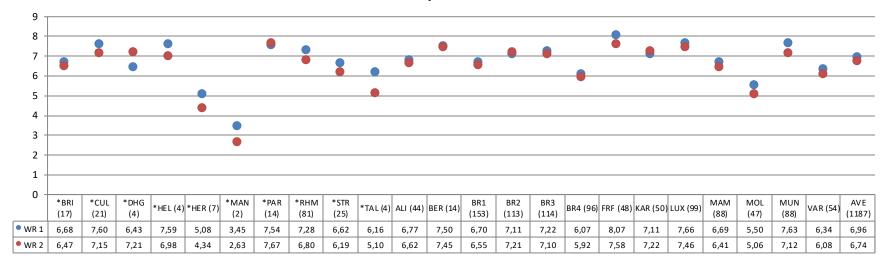
School year	*BRI	*CUL	*DHG	*HEL	*HER	*MAN	*PAR	*RHM	*STR	*TAL	ALI	BER	BR1	BR2	BR3	BR4	FRF	KAR	LUX	MAM	MOL	MUN	VAR	Aver.
2014/2015		7,85		5,80	3,85	6,07	6,41		6,43		6,52	6,97	6,42	6,13	7,15		7,71	7,58	6,76	6,66	5,67	7,07	6,80	6,75
2015/2016		8,18		4,33	6,20	6,41	6,87	6,69	5,14		6,77	5,96	6,78	6,25	7,30		7,20	7,16	7,12	7,18	5,75	7,28	7,47	6,88
2016/2017	4,64	7,17		5,44	5,76	6,19	7,38	6,12	5,05		6,04	6,15	6,31	5,67	6,46	5,25	7,50	6,87	6,31	6,42	5,52	7,01	6,18	6,31
2017/2018	3,21	7,13		4,94	4,28	3,03	6,40	6,65	4,76	6,29	5,89	5,95	6,01	5,88	6,26	5,03	6,94	6,89	6,63	6,44	5,52	6,61	6,36	6,14
2018/2019	6,58	7,38	6,82	7,28	4,71	3,04	7,61	7,04	6,41	5,63	6,70	7,49	6,63	7,16	7,16	6,00	7,82	7,17	7,57	6,53	5,28	7,37	6,21	6,85

# BACC 2019: MATH 3P written average (6,85)

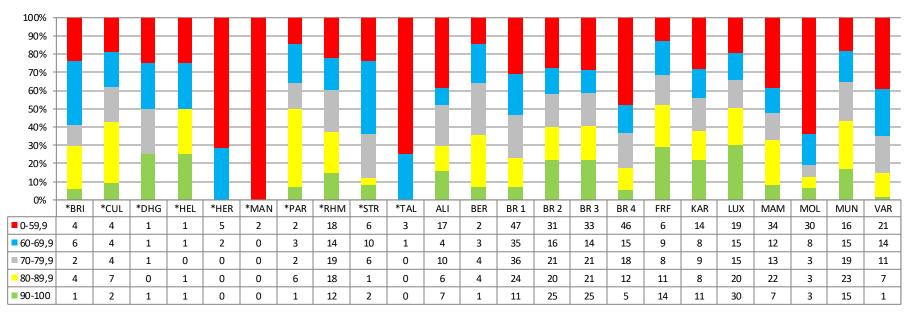


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### MATH 3P: comparison W1 vs W2



#### MATH 3P: distribution of written marks

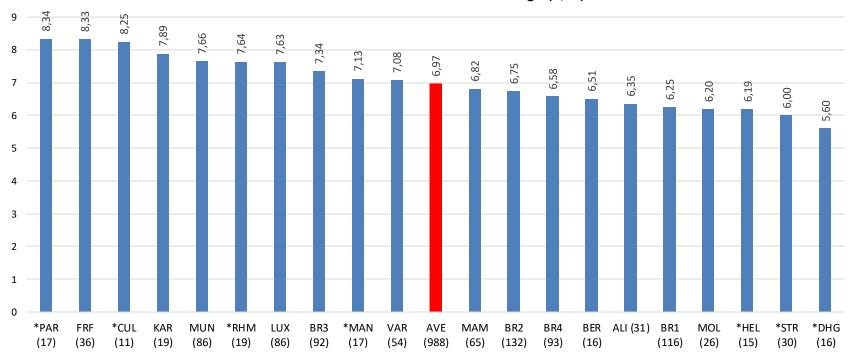


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# 7.3.5. Mathematics 5P (Success rate: 70.04%)

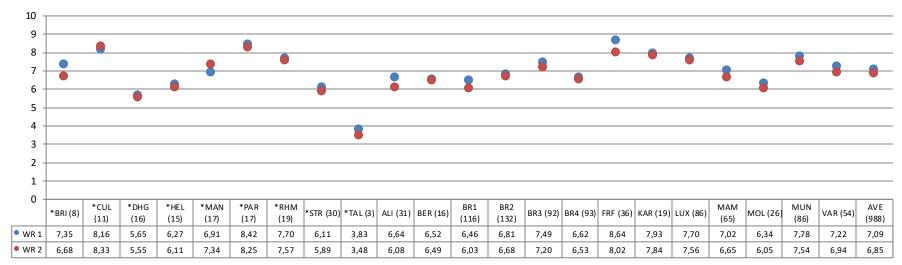
School year	*BRI	T∩⊃ <sub>*</sub>	*DHG	*HEL	*HER	*MAN	*PAR	*RHM	*STR	*TAL	ALI	BER	BR1	BR2	BR3	BR4	FRF	KAR	TUX	MAM	MOL	MUN	VAR	Aver.
2014/2015		7,86		5,72	3,80	6,51	6,92		5,28		6,49	6,32	7,68	6,77	7,14		8,07	7,23	7,43	7,80	7,88	7,60	7,54	7,22
2015/2016		7,32		5,98	4,75	7,15	7,69	6,22	5,82		6,00	5,88	7,07	5,98	7,03		7,80	7,19	6,99	6,93	5,95	7,37	6,75	6,76
2016/2017	4,59	7,83		6,02	6,10	7,07	6,96	7,57	5,96		7,02	6,35	7,23	7,14	6,99	6,49	7,75	8,03	7,16	7,04	6,71	7,77	7,46	7,11
2017/2018	5,22	7,76		4,36		7,39	7,56	6,62	6,03		5,34	6,30	6,74	6,27	6,08	5,98	7,55	7,61	7,13	6,64	6,63	6,99	6,78	6,54
2018/2019	7,02	8,25	5,60	6,19		7,13	8,34	7,64	6,00	3,66	6,35	6,51	6,25	6,75	7,34	6,58	8,33	7,89	7,63	6,82	6,20	7,66	7,08	6,97

# BACC 2019: MATH 5P written average (6,97)

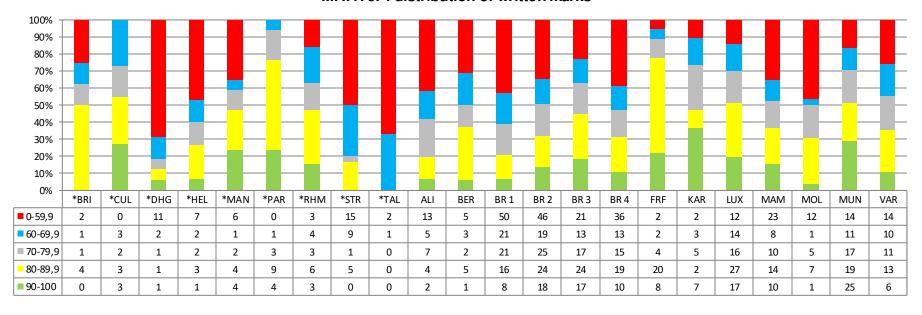


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# MATH 5P: comparison W1 vs W2



#### MATH 5P: distribution of written marks

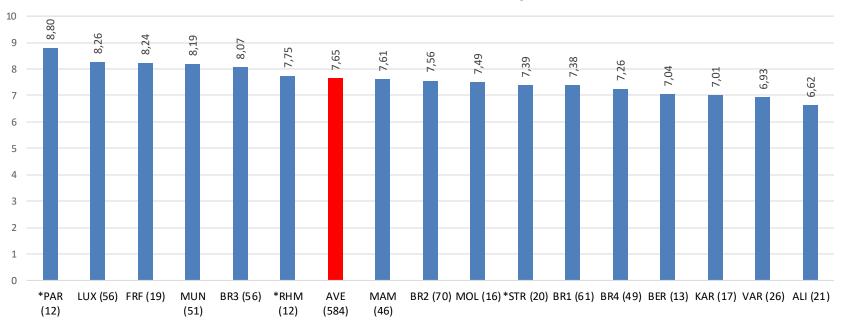


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# 7.3.6. Physics (Success rate: 81.30%)

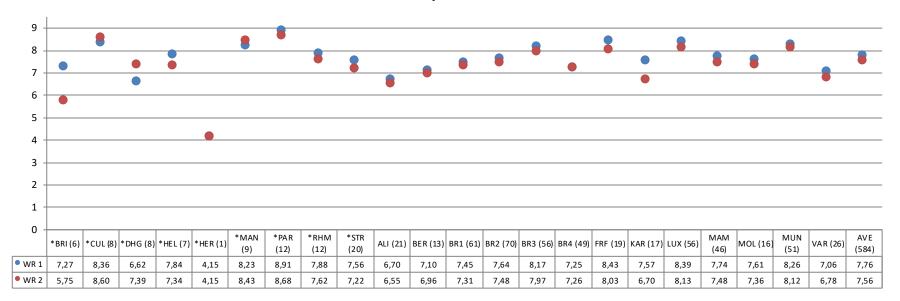
School year	*BRI	*CUL	*DHG	*HEL	*HER	*MAN	*PAR	*RHM	*STR	*TAL	ALI	BER	BR1	BR2	BR3	BR4	FRF	KAR	LUX	MAM	MOL	MUN	VAR	Aver.
2014/2015		7,17		6,03	6,15	6,63	6,45		4,90		6,95	6,57	7,58	6,50	7,70		7,59	6,76	7,19	7,60	7,91	8,11	7,41	7,22
2015/2016		7,96		6,60	7,45	8,08	8,36	5,57	6,92		5,90	6,45	7,73	6,92	7,69		8,16	7,42	7,56	7,30	6,80	7,81	7,86	7,45
2016/2017	3,70	8,27		6,19	6,65	8,05	7,71	6,65	6,84		7,62	5,95	7,61	7,27	7,86	6,97	8,04	7,47	7,08	7,62	6,89	8,07	8,11	7,44
2017/2018	4,95	9,15		7,36	7,38	8,12	8,06	7,37	7,58		6,79	7,10	8,23	7,80	7,92	7,60	8,18	8,17	8,16	7,92	8,12	8,64	8,32	7,92
2018/2019	6,50	8,48	7,01	7,59	4,15	8,33	8,80	7,75	7,39		6,62	7,04	7,38	7,56	8,07	7,26	8,24	7,01	8,26	7,61	7,49	8,19	6,93	7,65

# BACC 2019: PHYSICS written average (7,65)

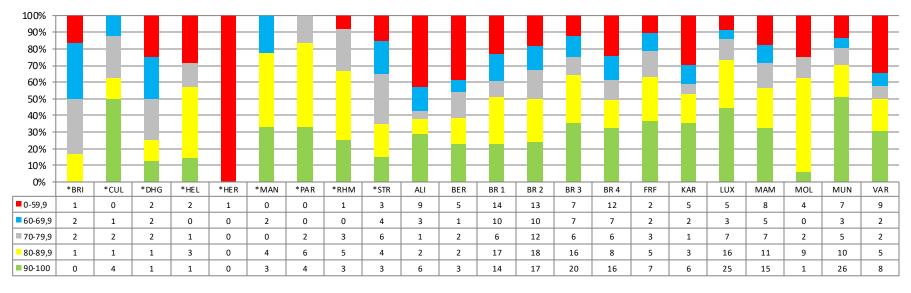


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### PHYSICS: comparison W1 vs W2



### PHYSICS: distribution of written marks



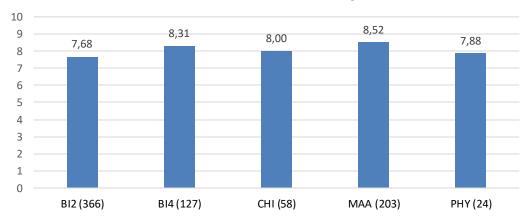
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# 7.4. Oral Mark Averages for Science EB Examinations

	Candidates	Oral aver.								
School	BI2	BI2	BI4	BI4	CHI	СНІ	MAA	MAA	PHY	PHY
*BRI	6	8,30	3	8,93						
*CUL	8	8,49	7	7,60			5	9,02		
*DHG	1	8,50			2	8,50			2	7,75
*HEL	1	9,30								
*HER	2	7,90								
*MAN	2	7,50			1	8,00	5	9,00		
*PAR	1	9,50	2	9,65	5	8,06	2	9,05		
*RHM	28	6,54	9	9,18			5	8,60		
*STR	12	8,04	11	8,63	2	7,40	6	7,73		
ALI	13	8,20	2	7,90	4	9,13	11	7,85	3	5,43
BER	3	7,17	6	7,92			5	7,60	1	9,50
BR1	59	7,83	13	8,63	3	8,17	23	8,66		
BR2	42	7,51	8	8,18	12	7,92	31	8,68	5	7,62
BR3	9	7,73	8	9,50	4	7,90	24	8,87	2	9,75
BR4	21	7,48	3	7,83	3	7,17	21	8,70	1	6,80
FRF	25	8,60	8	7,64	1	9,00	10	9,28	1	10,00
KAR	17	7,32	3	7,03	3	7,10	4	8,90	1	8,00
LUX	34	7,81	17	8,89	5	7,40	11	7,32	6	7,88
MAM	26	7,70	3	8,83	2	10,00	8	9,19	1	10,00
MOL	21	6,75	7	7,86			2	2,50	1	8,00
MUN	23	7,83	17	7,29	10	8,16	19	8,23		
VAR	12	8,03			1	6,00	11	9,07		
	366	7,68	127	8,31	58	8,00	203	8,52	24	7,88

	Candidates	Oral aver.	Candidates	Oral aver.	Candidates	Oral aver.	Candidates MAA	Oral aver.	Candidates	Oral aver.
	BI2	DIZ	BI4	D14	CHI	СНІ	WAA	MAA	PHY	PHY
2016/2017	359	7,67	111	7,84	48	8,22	158	8,44	27	8,06
2017/2018	353	7,56	113	7,86	73	8,14	193	8,51	25	8,31
2018/2019	366	7,68	127	8,31	58	8,00	203	8,52	24	7,88

EB 2019 - Science oral averages



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