



# Tracking Performance in the IB Diploma

dartford  
grammar  
school

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# Why track performance?

- To inform students & parents of progress
- To inform teachers if progress is as expected, and if not to trigger an intervention
- To inform the HOY if the student is performing across all subjects
- To inform the subject leader if classes are performing satisfactorily
- To inform Performance Management
- To inform the SMT of the year groups' and subjects' performance and their contribution to the whole school target
- To develop a target for the whole year group which is realistic and which allows VA and CVA.



# Methodology

- All performance tracking is based on making a prediction based on the students prior attainment – usually by taking their average GCSE attainment (APS) or by using a CAT test
- Relating this to an average outcome based on previous data which is generated national – regression equations
- This is the prediction. The target is then the prediction plus some value added



# Sources of Regression Data

- DfE (GCSE APS – total IB points)
- LEA
- ALIS
- ALPS
- FFT



# ALIS

## Regression Statistics 2010

Predicted Points Score = (Gradient x Baseline) + Intercept

Subject	Number	Gradient	Intercept	Correlation	Standard Deviation
Mathematical Methods	777	0.67	0.55	0.47	1.15
Mathematical Studies	3,325	0.71	0.65	0.60	1.00
Mathematics	2,058	0.82	-0.61	0.50	1.14
Music	48	0.80	0.03	0.69	0.85
Philosophy	195	0.73	0.88	0.68	0.71
Physics	850	0.86	-0.79	0.73	0.93

$$4.91 = (0.71 \times 6) + 0.65$$



## A grade B student's predictions – based on GCSE APS

$$\text{HL Bi} \quad (0.88 \times 6) - 0.60 = 4.68$$

$$\text{HL Ch} \quad (1.06 \times 6) - 2.16 = 4.20$$

$$\text{HL Py} \quad (0.70 \times 6) + 0.95 = 5.15$$

$$\text{SL MS} \quad (0.71 \times 6) + 0.65 = 4.91$$

$$\text{SL En} \quad (0.70 \times 6) + 0.58 = 4.78$$

$$\text{SL Fr} \quad (0.80 \times 6) - 0.49 = 4.31$$

Total: 28.03

Can also use the CABT to generate predictions



## A grade B student's targets

HL Bi	4.68	→	5 or 4
HL Ch	4.20	→	4
HL Py	5.15	→	5
SL MS	4.91	→	5 or 4
SL En	4.78	→	5 or 4
SL Fr	4.31	→	4
Total: 28.03			



# Individual targets make the whole school target

6 subject targets  $\longrightarrow$  student target

Average student + Core  $\longrightarrow$  whole school target

Adjust rounding until the average student target plus an allowance for the core meets the whole school target



# Coherence between targets

This establishes clear links between

- individual student subject targets and the whole school target
- individual student targets and the subject targets
- individual student targets and the class targets



# Procedure

- Our data manager calculates predictions and provisional targets early in September as soon as the GCSE APS are known and the latest ALIS regression equations become available
- The targets are entered into SIMS Assessment Manager
- Staff assess students' initial performance and grade early in October
- Results are exported into Excel and the overall school target is calculated based on students' choices of subjects
- Students' targets are adjusted to bring the whole school target in line with the desired target



# Targets for a student with our minimum entry requirements: 3 As & 4 Bs

HL Bi	5.05	→	5
HL Ch	4.75	→	5
HL Py	5.44	→	5
SL MS	5.21	→	5
SL En	5.07	→	5
SL Fr	4.65	→	5
Total: 30 plus 1.8 core = 31.8			



# Assessment Points

Year 12	Year 13
End of October	End of October
Christmas	November after Y13 exams – grades & report
Easter	January
May after Y12 exams – grades & report	Easter – these are also the predicted grades reported to the IB
July	



Year 12 IB Grade Sheet for XXXXXXXXXXXX in form 12x

	Higher/Standard	IB Minimum Target Grade	Y12 Autumn (Interim)			Y12 Autumn			Y12 Spring			Y12 Summer			UCAS Prediction
			Attainment	Effort	Ind. Study	Attainment	Effort	Ind. Study	Attainment	Effort	Ind. Study	Attainment	Effort	Ind. Study	
Chemistry	S	6	6	A	A	6	A	A							
English	H	6	6	A	A	6	A	A							
French	H	6	6	A	A	6	A	A							
History	S	6	6	A	A	6	A	A							
Maths	H	5	6	A	A	6	A	A	7	A	A				
Russian	Sab.	6	7	A	A	7	A	A							
Theory of Knowledge			A	A	A	A	A	A							



Year 13 IB Grade Sheet for XXXXXXXXXX in form 13x

	Higher/ Standard	IB Minimum Target Grade	UCAS Prediction	Y12 Summer			Y13 Autumn (Interim)			Y13 Autumn			Y13 Spring		
				Attainment	Effort	Ind. Study	Attainment	Effort	Ind. Study	Attainment	Effort	Ind. Study	Attainment	Effort	Ind. Study
<b>Chemistry</b>	H	5	7	6	A	A	7	A	A	6	A	A			
<b>English</b>	S	5	5	5	A	A	5	A	A	6	A	A			
<b>Maths</b>	H	5	5	7	A	A	5	A	A	5	A	A	5	A	A
<b>Physics</b>	H	5	6	6	A	A	5	A	A	6	A	A			
<b>Spanish</b>	S	5	6	6	A	C	5	A	B	5	B	B			
<b>World Politics</b>	S	6	6	6	A	B	6	A	B	6	A	B			
<b>Theory of Knowledge</b>				A			B	B	B						



# Head Of Year's Report

student	Average Residual	Average Levels	Total Levels	Total Alis Target Levels	Total levels - Alis Targets	Number of Subjects	Total Higher Levels	Total Standard Levels	Underachieving Subject Count
1	0.67	6.5	39	35	4	7	19	20	0
2	-0.17	4.67	28	29	-1	7	16	12	2
3	-1	4.33	26	32	-6	7	12	14	5
4	-0.5	4.5	27	30	-3	7	14	13	3
5	0	4.67	28	28	0	7	16	12	1



# Head Of Year's Report

## Subject results

Subject	SL/ HL Residual		
		Astronomy	0.75
Arabic	0	Chinese	-2
Art	0.67	German	-0.31
Biology	0.38	Geography	0.33
Business Studies	-0.3	History	-0.09
Classics	0.5	If	0.67
Chemistry	0	Italian	3
Computer Science	0.22	Japanese	-0.12
DT	0.29	Latin	0.08
Economics	-0.03	Maths	-0.27
English	0.27	Music	-0.17
Ecosystems	-0.42	Physics	-0.13
Film	-0.29	Philosophy	-0.05
French	0.02	Spanish	-0.31
Theatre Arts	0.62	World Politics	0.5



# Monitoring

## Triggers:

- Total Points < 24 – for certain
- Total points < 28 – dependent on workload
- Total HL < 12
- Total of 3 or more underachieving subjects
- 2 C or D grades for effort & independent study

## Interventions:

- By subject teacher
- By form tutor
- By Head of Year/Deputy Head of Year



# Key Points in the Programme

## October Y12

- Initial position – HOY identifies struggling students, students in wrong subjects; tutor report/HOY report

## Y12 Exams

- minimum 23 points required
- followed by interview with sixth form staff to prepare for UCAS

## Y13 Exams

- Minimum 24 points/12 points HL
- Mentoring by HOY/ SLT



# Teachers' worksheet

Surname Forename	IB Ch Target Higher	IB Ch High/ Standard Flag	IB Ch UCAS Prediction IB UCAS Predictions Y13	IB Ch Attain ment~4 Year 12 Summer	Ch Effort t~4 Year 12 Summer	Ch Homewor k~4 Year 12 Summer	IB Ch Attain ment Year 13 Autu mn (Interi m)	Ch Effort Year 13 Autu mn (Interi m)	Ch Homewor k Year 13 Autu mn (Interi m)	IB Ch Exam Grade Year 13
XXX	6	H	6	6	A	A	6	A	A	6
XXX	4	H	4	4	B	A	6	A	A	6
XXX	5	H	5	4	B	A	5	A	A	5
XXX	6	H	5	5	B	A	6	A	A	6
XXX	5	H	5	5	A	A	6	A	A	6
XXX	5	H	5	5	A	A	5	A	A	4
XXX	6	H	6	6	A	A	6	A	A	7
XXX	5	H	5	5	A	A	5	A	A	4
XXX	6	H	6	6	A	A	6	A	A	6
XXX	5	H	5	4	A	A	5	A	A	5
XXX	5	H	6	6	A	A	7	A	A	7
XXX	6	H	6	5	A	A	5	A	A	5
XXX	5	H	5	5	A	A	6	A	A	6
XXX	4	H	4	4	A	A	4	A	A	3



# Performance Management

## September/October Planning meeting

- Targets set for the coming year
- Pupil performance target mandatory

## September/October Review meeting

Targets reviewed by comparing with actual grades achieved, eg

- IB Business and Management (HL) Target IB Level 4.75; Actual 5.4; Residual +0.65
- IB Economics (SL) Target IB Level 6.0; Actual 6.0 Residual 0.0
- IB Economics (HL) Target IB Level 5.46; Actual 5.53; Residual +0.07



# Yearly Departmental Review

## September Review meeting with the Head

- Subject exam performance reviewed
- Subject targets agreed for the coming year

Class / Teacher / Group size	7	6	5	4	7-	3	2-	X	Residual		Average IB Level		
	%	%	%	%	4%	%	1	%					
XXXXX	22	22	11	33	89	11			0.44		5.1		
XXXXX	14	14	29	29	86	14			0.43		4.9		
									2010	2009	2010	2009	2008
<b>Year 13 Higher</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>31</b>	<b>88</b>	<b>13</b>			<b>0.44</b>	<b>0.40</b>	<b>5.0</b>	<b>5.1</b>	<b>4.8</b>
XXXXX	14	57	14		86	14			1.00		5.6		
XXXXX	40	20		40	100				0.80		5.6		
									2010	2009	2010	2009	2008
<b>Year 13 Standard</b>	<b>25</b>	<b>42</b>	<b>8</b>	<b>17</b>	<b>92</b>	<b>8</b>			<b>0.92</b>	<b>-0.30</b>	<b>5.6</b>	<b>4.6</b>	<b>5.4</b>



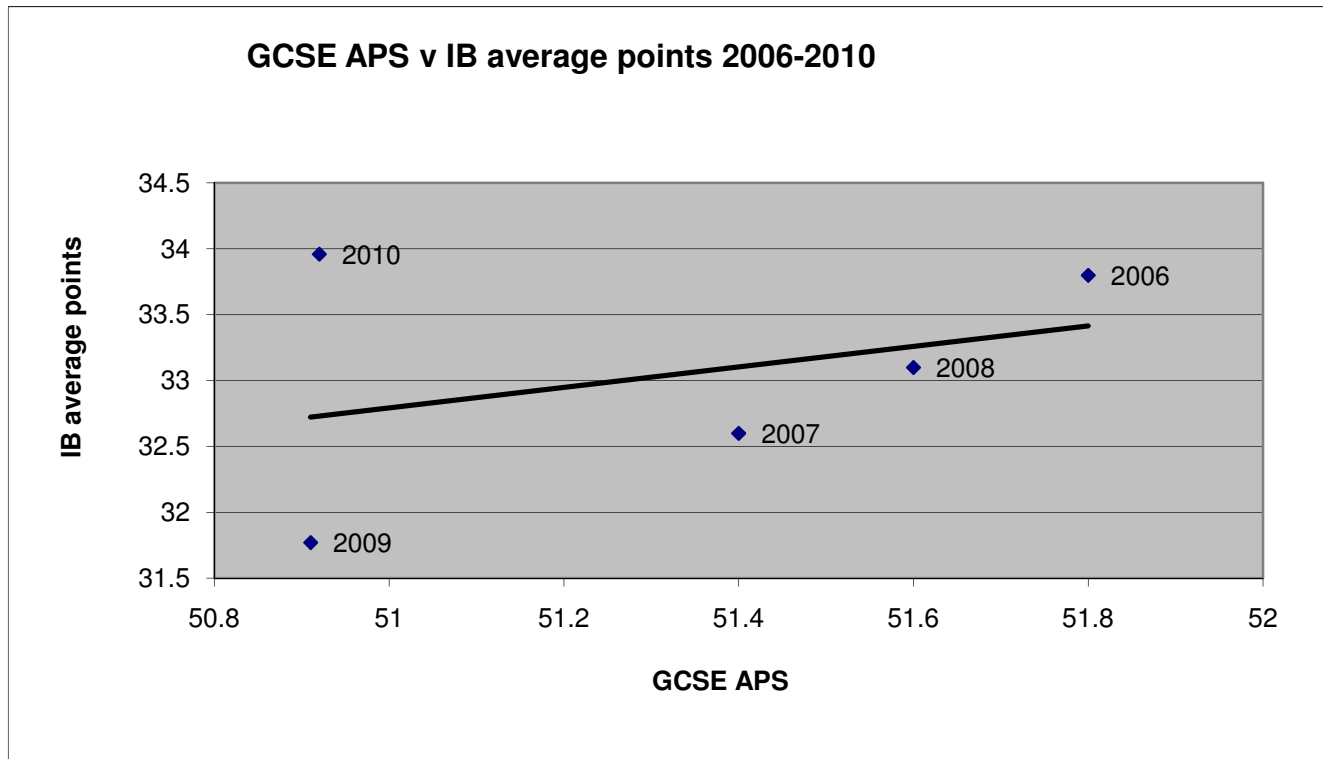
## **LG Faculty Review**

**2 year cycle – current focus Y11 and the Diploma**

- **Attainment – in comparison with targets**
- **Lesson Observations**
- **Teacher feedback**
- **Student feedback – do students know their targets?**



# Year on Year Comparison





## TEST AND EXAMINATION POINT SCORES USED IN THE 2010 SCHOOL AND COLLEGE PERFORMANCE TABLES

International Baccalaureate Diploma Passes					
Grade	Size	Points	Grade	Size	Points
45	5.5	1518	33	5.5	1122
44	5.5	1485	32	5.5	1089
43	5.5	1452	31	5.5	1056
42	5.5	1419	30	5.5	1023
41	5.5	1386	29	5.5	990
40	5.5	1353	28	5.5	957
39	5.5	1320	27	5.5	924
38	5.5	1287	26	5.5	891
37	5.5	1254	25	5.5	858
36	5.5	1221	24	5.5	825
35	5.5	1188			
34	5.5	1155			



## DfE Attainment Table points #2

**Certificate points are not in the DfE points table but are awarded except for Ab Initio languages**

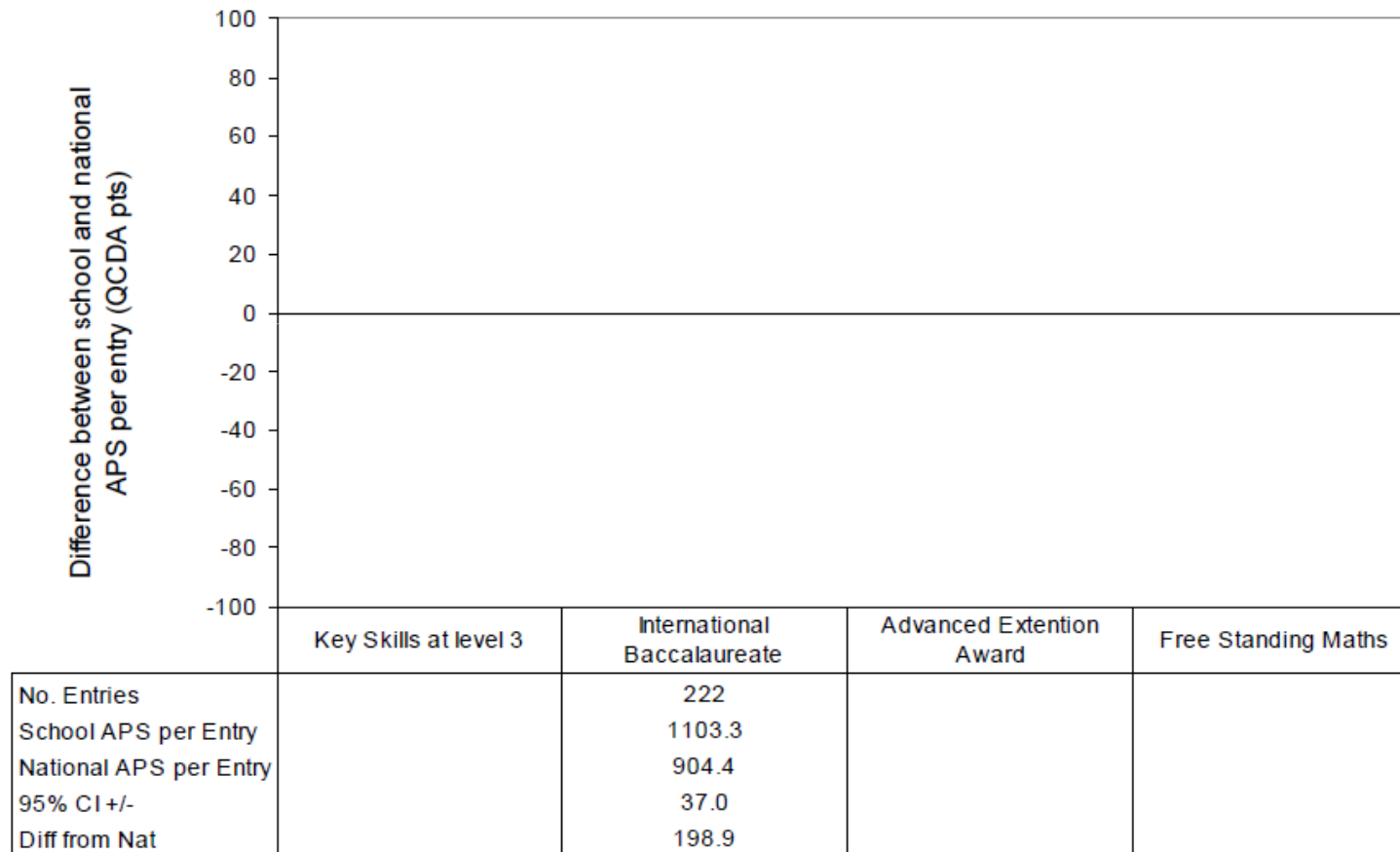
	H	S
7	202.5	135
6	168.75	112.5
5	146.25	97.5
4	123.75	75
3	0	0
2	0	0
1	0	0

**Inconsistent with the total diploma points**



# Sixth Form Panda #1

Chart 2.26: Average point score per entry for other qualification types in 2009/10

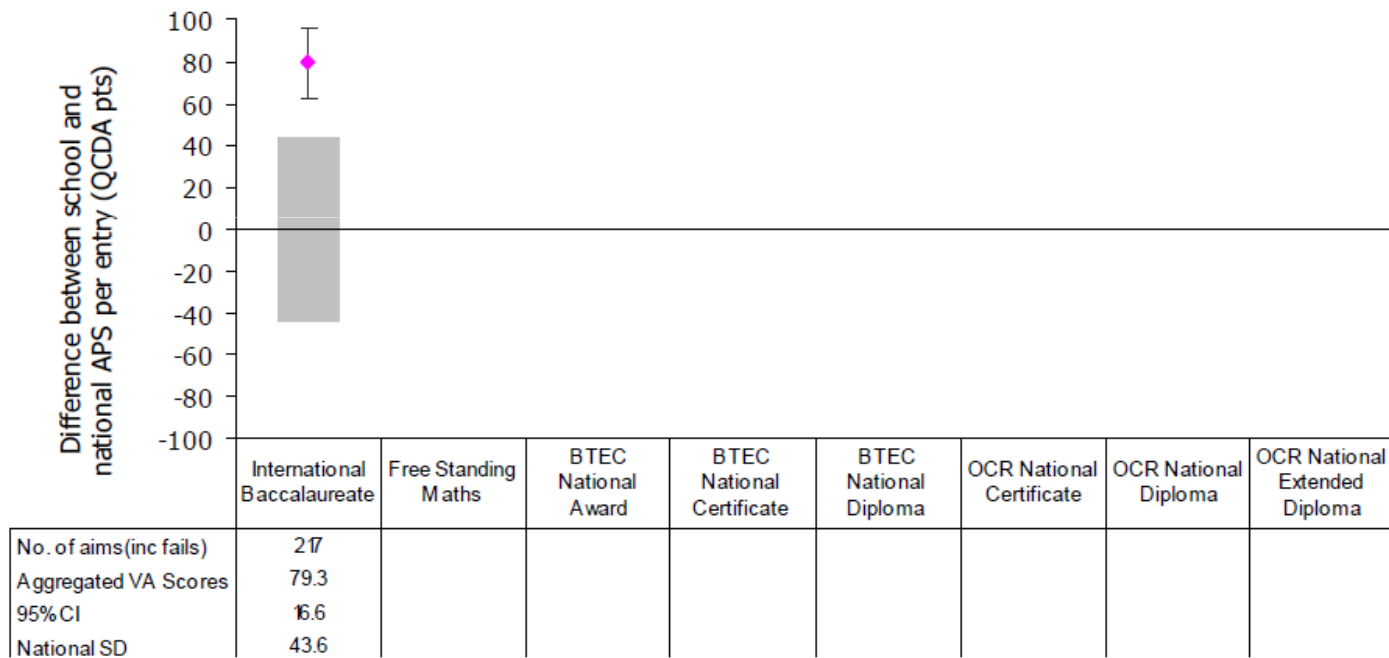


Source: DfE Post16 Achievement and attainment tables (December 2010) – Validated data



# Sixth form Panda #2

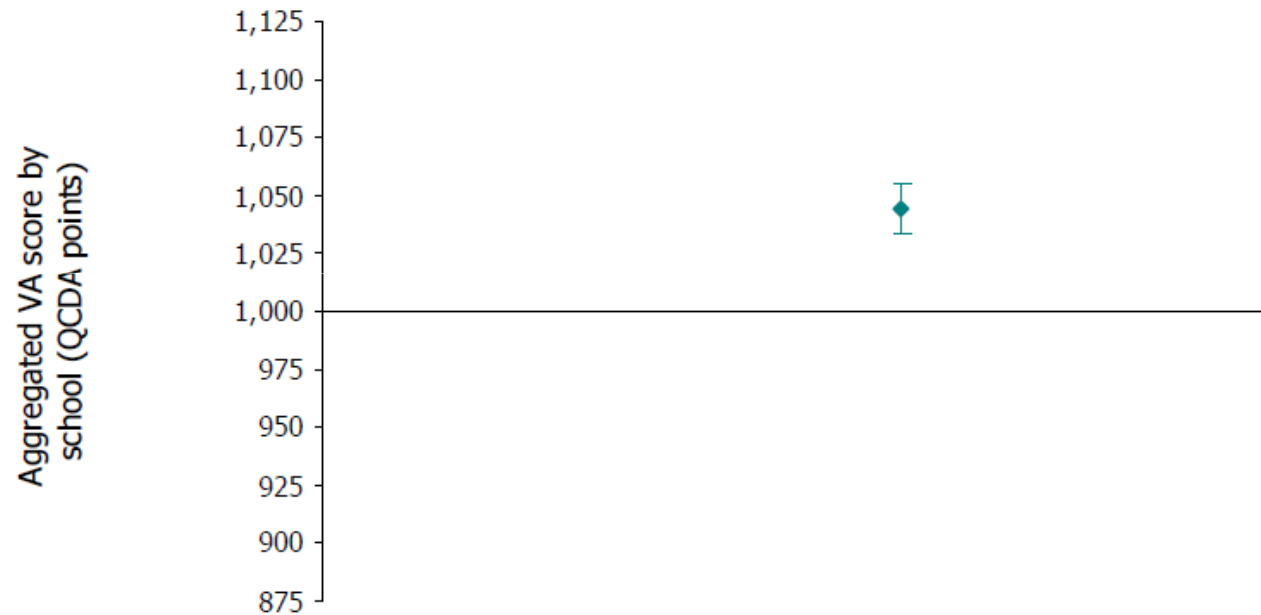
Chart 3.4: Value added score by other qualification type in 2009/10





# Sixth form Panda #3

Chart 4.2: DfE Value Added (DfEVA) Score – 2009/10



DfE VA Score	1,044.8
UpperCI	10.7
LowerCI	-10.7
DfE VA Student Coverage (%)	99.1

Source: DfE Post16 Achievement and attainment tables (December 2010) – Validated data