

### Examination Analysis 2018/19

### Introduction

Scarborough UTCs first set of GCSE and A level results, August 2018, were significantly below expectations as a result of a lack of high expectations, no data processes in place and generally inadequate teaching throughout a significant part of the two academic years leading up to these examinations. From April 2018, greater rigour and consistency in teaching, assessment and the management of behaviour alongside effective staff recruitment and strong leadership of the UTC culture and ethos of high expectations and high aspirations has been able to drive up standards at Scarborough UTC. Outcomes for students in August 2019 in all areas show improvement and in some subjects significant improvement on the previous year and reflect the upward improvement trajectory of the UTC, reflected in our own self-evaluation and our OfSTED report of January 2019.

This examination results analysis for Scarborough UTC and this booklet is designed to provide:

- an annual summary report for governors, improvement partners and inspectors;
- a reference document for directors of subject and staff within the school;
- an evidence base showing the rigour, reflective and evaluative nature of our self- review;
- a summary of action planning for future improvements;

### Summary of achievement and progress

The results in the summer of 2018 were a low point for the UTC at the end of its first two years of opening. These results positioned Scarborough UTC as having **around the weakest results for all UTCs**.

As a result of detailed and focused improvement plans across all areas of the UTC, the results of summer 2019, have elevated Scarborough UTC to being the stand out, most improved UTC for attainment nationally, as the tables below indicate.

### Key Stage 4 Attainment (compared to UTCs nationally)



The improvements in English (74.4% 4+) and Mathematics (58.9% 4+) and the correlation between those students achieving both English and Maths has resulted in significant improvement on these headline measures. Locally, whilst using unverified data currently, we believe we have outperformed at least three local feeder schools by a large margin.

Our Attainment 8 Points score (that is the sum of a student's best 8 GCSE grades, averaged across all students in the cohort) has improved and we have therefore moved to 50<sup>th</sup> percentile. Our target of being in the top 10% however would need to see a further 10 point increase in our Attainment 8 points. When reviewing performance across all subjects, which Attainment 8 draws from, science, computer science, geography and engineering design, were significantly below target and as such there is room for improvement here to ensure all students achieve their targets in all of their subjects.

### Key Stage 4 Achievement for all subjects and groups

### Scarborough UTC

Headline Figures - Year 11 - Results, Exam Year 2019

Overall	This Collection	Last Collection	Last Year (2018)
- Attainment 8	37.2	42.5	★ 30.5
- Progress 8 (2018 benchmark)	-0.92	-0.36	<b>1.24</b>
- English and maths (% 4 and above)	57.5	♦ 62.2	<b>1</b> 23
- English and maths (% 5 and above)	31.5	⇒ 35.1	13
- English Baccalaureate	2.92	➡ 3.32	<b>1</b> 2.56
English			
- % 4 and above	74.0	→ 74.3	<b>1</b> 30
- % 5 and above	50.7	⇒ 50.0	17
- Progress 8	-0.44	-0.18	<b>1.44</b>
Mathematics			
- % 4 and above	58.9	➡ 70.3	<b>1</b> 44
- % 5 and above	35.6	+ 40.5	<b>1</b> 24
- Progress 8	-0.62	-0.08	<b>+</b> -0.68



46.5

-0.02

64

43

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75.4

-0.04

69.5 49.3

-0.02

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### Scarborough UTC

Subject List Summary, Collection: Year 11 - Results, Exam Year: 2019



																					_		
	Num. of	Per (GC	centag SE 9-1 (	e achie equival	ving ent)	APS	RPI	Tar Diff		La	ast Colle	ection			Las	st Year	(2018	)		Nati	ional (	(2018)	
	stud.	9-7	9-5	9-4	9-1					9-5	9-4	AP	S		9-5	9-4	AP	S	9	1-5	9-4	AP	S
Mathematics																							
Maths (General)	73	7	36	59	99	3.9	0.6	-1.1	1	41	70	4.4	٠	1	25	45	3.4	1	5	51	71	4.6	+
English									•					•									
English Language	73	8	33	56	95	3.8	0.5	-1.1	1	43	74	4.5	+	1	16	21	2.9	+	1	54	71	4.7	
English Literature	73	10	48	73	97	4.4	1.2	-0.5		50	72	4.6			15	31	3.1	+	5	56	73	4.8	+
Ebacc (Science)								1															
Biology	72	4	19	33	96	3.1	-0.3	-1.8	1	39	50	3.8	+	1	31	62	4.1		8	30	90	6.1	+
Chemistry (General)	32	6	41	69	100	4.3	-0.5	-1.9		34	81	4.2			27	58	3.8	+	7	78	90	6.1	+
Computer Science	72	6	10	21	83	2.2	-1.3	-2.5		28	46	3.4	٠		14	18	2.2		1	48	62	4.4	٠
Physics (General)	72	4	17	32	96	3.1	-0.3	-1.8		31	47	3.4	٠		46	65	4.3		7	79	91	6.1	٠
Ebacc (Humanities)																							
Geography	71	4	24	31	85	2.8	-0.7	-1.9		30	44	2.9		1	8	18	2.5		5	52	65	4.7	+
Open									890					÷									
Engineering Studies (OCC)	69	10	20	42	97	3.2	-0.3	-2.6	1	31	57	4.1		1			-		1 -	-	-	-	
Manufacturing Engineering (OCC)	71	20	38	59	97	4.1	0.8	-1.6		39	63	4.3			-	-	-			- )	-	-	

### Scarborough UTC

### Pupil Characteristics - Year 11 - Results, Exam Year 2019

# SCARBOROUGH

Group	Num.	En. & Ma 5+		Atta	Attain. 8		English		Maths		EBacc		Open	
Group	Stud.	Sch	Nat	Sch	Nat	Sch	Nat	Sch	Nat	Sch	Nat	Sch	Nat	
All Students	73	31.5	43.3	37.2	46.5	9.1	9.9	7.7	9.0	9.3	13.4	11.1	14.2	
Male	53	35.8	40.0	36.0	43.8	8.6	9.0	7.8	9.0	9.2	12.8	10.4	13.0	
Female	20	20.0	46.7	40.3	49.3	10.4	10.8	7.5	9.1	9.7	14.0	12.7	15.5	
FSM6	4	100.0	21.6	58.3	34.4	12.0	7.6	12.0	6.5	17.0	9.4	17.3	10.8	
Not FSM6	69	27.5	46.4	36.0	48.3	8.9	10.2	7.5	9.4	8.9	14.0	10.7	14.7	
Looked after child	0													
Not looked after child	73	31.5		37.2		9.1		7.7		9.3		11.1		
Disadvantaged	4	100.0	24.9	58.3	36.7	12.0	8.1	12.0	7.0	17.0	10.1	17.3	11.5	
Non-Disadvantaged	69	27.5	50.1	36.0	50.1	8.9	10.6	7.5	9.8	8.9	14.6	10.7	15.2	
Low KS2	10	0.0	2.4	21.7	22.6	6.4	5.3	4.4	3.7	4.2	5.8	6.7	7.7	
Middle KS2	35	14.3	24.6	30.2	40.8	7.8	9.0	6.3	7.7	6.9	11.2	9.2	12.8	
High KS2	26	65.4	77.6	50.8	61.1	11.5	12.6	10.5	12.3	13.9	18.2	14.8	18.0	

### Key Stage 5 Attainment (compared to UTCs nationally)



The improvements in average A level grade, from E+ to C+, is very pleasing and now positions us in the top 10% of UTCs nationally. In addition, the improvements in engineering grade average of Pass + to Distinction/Distinction\* has moved us to the 25<sup>th</sup> percentile. Our strengthening of the engineering team should ensure that students achieve equally highly across all units of their engineering qualifications and so improve their points score, which will help to us move towards our target of top 10%. Notably teaching, assessment, tracking aid monitoring are now much improved and reflected in these results.

Alps is a measure of student performance against benchmarks for each subject. Alps is a value added tool. It considers the progress a student makes from the start of their course (measured via their GCSE scores) through to the completion of the course (their A/AS/vocational results).

ALP's benchmarks at KS5 are created using the full national dataset supplied by the Department for Education. Alps reports compare our performance against a benchmark which is based on every students' results nationally. Using these benchmarks each subject is given a score from 1 to 9 on the ALPs thermometer to grade performance. See diagram and tables overleaf:

### ALPS K55 data analysis

Mato	hing top 25%+	RED	Alps grades 1 – 3	
Match	ing middle 50%	BLACK	Alps grades 4 – 6	
Matchi	ng bottom 25%-	BLUE	Alps grades 7 – 9	
Alps Colours RED mea BLACK m BLUE mea	ns your performance eans your performan ans your performance	is within or exceeds the ce is between the best 2 e is within or is worse th	top 25% of the benchmark fo 5% and the worst 25% of prov an the bottom 25% of the ben	r the indicator. iders on the benchmark for the ii chmark for the indicator.
Alps grades	1 – 9 – basis of the gr	ading system		
	1 Outstandin Better or equ	<mark>g</mark> ual to the best score achieve	d in the indicator	
100%	2 Outstandin Scoring betw	g veen the 90th and 99th perc	entile	
90%	3 Excellent	yean the 75th and 80th narc	entile	
75% —	- Very good	veen nie 750 min 650 perc	entre -	
60%	4 Scoring betw	veen the 60th and 74th perc	entile	
40%	5 Satisfactory Scoring betw	<b>/ to Good</b> ween the 40th and 59th perc	entile	
.40.70	6 Below avera	<b>age</b> veen the 25th and 39th perc	entile	
25% —	7 Less than so Scoring betw	atisfactory veen the 10th and 24th perc	entile	
10% —	8 Relatively p Scoring betw	poor yeen the 1st and 9th percent	ile	
Bottom	Poor			
	Below the lo	west score achieved in the in	ndicator	

Cubicas 🌢		2017/18		2018/19					
Subject 🗸	Entries 🖨	Score 🖨	Grade 🖨	Entries 🖨	Score 🖨	Grade 🖨			
A - Computer Science	6	0.37	8	3	0.98	3			
A - Mathematics	2	0.64	8	9	0.81	7			
A - Physics	2	0.47	8	7	0.97	2			
AS - Use of Mathematics	11	0.84	5	4	1.00	3			
16 CT Ext Cert - Engineering	7	0.30	-	2	1.28	1			
16 CT Dip - Engineering	10	0.49	-	18	0.82	-			
16 CT Ext Dip - Engineering	6	0.23	-	6	0.63	-			

ALPs 1 - 3 positions us in the top 25% nationally, when compared to all providers. A reminder that the red colour used for grades 1 - 3 are linked to the ALPs thermometer (see diagram).

### Strengths

Subjects with strong performance and improvement are GCSE English Literature and engineering manufacture and A level physics, computer science, core maths and Cambridge Technical in Engineering. Subjects with good improvement from 2018 are GCSE English Language, mathematics and engineering design and in KS5, A level mathematics.

### Areas for development

GCSE Mathematics has improved by nearly 20% from last year but still has some way to go to move to be in line with and exceed national averages in the subject. The staffing issues which plagued the subject during the 2017/18 academic year and for most of the Autumn term 2018 have now been resolved. The maths team is now established and teaching is improving as are outcomes in current year 11 which bodes well for outcomes in summer 2019.

In order to increase the GCSE attainment 8 points score and the overall progress score we need to aim to improve attainment and progress in those subjects that lag behind English and mathematics and increase the number of students that achieve the higher GCSE grades, that is grades 7,8 and 9.

Changes have been made to the curriculum which means that computer science and geography are now optional subjects, taught in smaller groups with consistent teaching. With these changes in place we expect to see significant improvements towards targets in summer 2020.

Science is a completely new team formed at the start of this academic year. Teaching in science to this point had been of very limited quality and curriculum time allocation was insufficient and as a result student progress was significantly below expected. There have been some improvements in grades this year, particular in the stretch group, however with steady staffing and teaching time increased we expect to see much greater improvements this year.

Lee Kilgour

Principal Scarborough UTC

September 2019



### Self-Evaluation cycle **Examinations Analysis** – For Year Groups with External Results or heading to external results within one year (September 2019)

Subject area: Science

Director Of Subject: Mrs Janine Wade

### General:

It is difficult to draw any meaningful comparisons with last years and this year's results, or to compare our results with other institutions. This is because last year SUTC, and most other institutions historically and currently, only teach triple science as an option or to the top 10% of students.

Therefore the closest comparison I can make between years groups is with the triple results from 2017-2018 and 11 U 2018-2019.

Course	%4+ 2017-2018	%7 + 2017-2018	% 4+ 2018-2019	%7 + 2018-2018
GCSE Biology	61.5	19.2	80.8	11.5
GCSE Chemistry	27.2	7.7	75	7.1
GCSE Physics	65.3	15.4	78	7.1

Comparison of triple candidates from 2017-2018 (Top set) and 11 U from 2018-2019

This indicates that across the board our % 4+ has increased dramatically, but our %7+ has reduced.

T and C sat GCSE Biology and Physics this year and the equivalent groups last year sat Double award Science, therefore it is more difficult to draw direct comparisons with markers such as SISRA value added or ALPS. The courses are drastically different, examined differently and are reported differently. In the interest of fairness I have used the 2018-2019 subject comparison residuals as comparison between students' performance in science and other subjects, with values ranging between -0.28 and -0.03, they are negative, but not massively so.

All of the staff at the beginning of 2018-2019 were new and had no reliable data on students' progress and attainment in Science, therefore we used February PPE data to predict student outcome. We hypothesised students should make at least a grade up on their PPE results. For a majority of our students, this wasn't the case. I believe this was in part due to legacy issues, such as learning gaps, time constraints to cover content and student motivation to do well in science. Plans that have been in place since September 2018 will ensure that these issues should not affect future cohorts. For example in 2018- 2019 the year 11 were taught right up until their exam period, meaning there was not time for staff to be able to structure revision, develop examination skills and technique or identify and address legacy gaps in teaching and learning. Whereas, in 2019-2020, all Science GCSE course content will be covered by the February half term at the latest to enable this to occur.

Our GCSE predicated grades were based on 2017-2018 grade boundaries (the only ones available at the time), the grade boundaries this year have changed significantly. For example, GCSE Biology Foundation tier 2017-2018 required 107 marks to attain a level 4, this year it was 114. Than meant that 5 of our students could have been effected by this grade boundary shift. Some grade boundaries were raised by up to 10 marks. In total 18 students in GCSE Biology, 8 in Chemistry and 15 in Physics got a lower grade this year due to the grade boundary shifts.

The result of this and the aforementioned prediction method meant that our predications have overestimated our results. Both sets of PPE'S were moderated internally and externally by 2 different SLE's and marking was found to be within tolerance, so I don't believe the issue is an internal one (eg, marking). We will, however, need to adjust our year 10 PPE grade boundaries to reflect the significant shift this summer to avoid this in the future. Because we have only 2 sets of grade boundaries, which are significantly different, currently this will make predicting grades difficult until another GCSE round has

occurred. I propose we shift to work at the more challenging grade boundaries to reduce the risk of over estimating grades.

There were a significant number of students in both GCSE Biology and Physics that attained a grade 3 in 2018-2019, gains can be made in this area to increase our **overall** %4+ for next year. It is also worth noting that a significant proportion of these students were from classes that experienced high levels of disruption in learning in 2017-2018 and had behavioural challenges in 2018-2019, which will have had an effect on student outcomes.

The lower %7 + this year at top set level is due to significant weaknesses in teaching and learning in 2017-2018 impacting the cohort. There wasn't enough time to be able to cover course content to the depth and the consolidation of learning needed for students to be able to access the higher grades. Those students who followed our direction and completed revision tasks set, achieved the higher grades still.

Last year was a matter of recovering from previous damage and stabilising the department and results. Although the 2018/2019 results were not as positive for science as they were for the more established departments within the SUTC, I believe they are a positive indication that the decline has been stabilised.

To conclude I believe the changes we have made 2018-2019 had a positive impact upon the year 11 cohorts outcomes in science, however we shall see the impact of these changes on GCSE results more in the coming years. In reflection, the focus for 2019-2020 cohort should be on converting the 3 to 4 boundary and pushing the top level students.

## Key Stage 4 Results - Analysis

### **Grades 9 – 4 or equivalent Percentages**

Comparison of triple candidates from last year (top set) and 11 U from this year:  $\overline{\mathbb{R}}$ 

Course	%4+ 2017-2018	% 7 + 2017-2018	%4+ 2018-2019	%7+2018-2019
GCSE Biology	61.5	19.2	79.3	10.3
GCSE Chemistry	27.7	7.7	71	6.4
GCSE Physics	65.3	15.4	74	9.7

### Year 11

### **Performance of Groups:**



#### **GCSE - Chemistry - Overall**

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#### All grades and Total actual points

tudent

30

Points

Pts total

Overall

Female

Male

#### Expected points



≥	
2	
201	
9	
8	
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0	
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Avg prior achievement	Students	×	Minimum Expectation	=	Total exp
5.67+	3	×	7.46	=	22.38
5.33 -< 5.67	12	×	6.38	=	76.56
5.00 -< 5.33	7	×	5.48	=	38.36
4.67 -< 5.00	3	×	4.71	=	14.13
4.33 -< 4.67	3	×	4.08	=	12.24
4.00 << 4.33	2	×	3.58	=	7.16
3.67 -< 4.00	0	×	3.20	=	0.00
3.33 -< 3.67	0	×	2.91	=	0.00
3.00 -< 3.33	0	×	2.67	=	0.00
0.00 -< 3.00	0	×	2.29	=	0.00

Students = 30 Expected points total = 170.83

		2018/19	
Teaching set	Students	Score	Grade
11C/CHG	3	0.80	8
11U/CHG	27	0.70	8

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Alps

See the 'Alps Guide' for more information.

#### **GCSE - Physics - Overall**

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#### All grades and Total actual points

udent 9 8 7

70

Points × 9

Pts total 9

Overall

Female

Disadvantaged

Non-Disadvantaged

Male

1

0

0 7

1 × 8

× 7

### Expected points



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Avg prior achievement	Students × Minimum Expectation				Total exp				
5.67+	3	×	7.46	=	22.38				
5.33 -< 5.67	12	×	6.38	=	76.56				
5.00 -< 5.33	13	×	5.48	=	71.24				
4.67 -< 5.00	9	×	4.71	=	42.39				
4.33 -< 4.67	13	×	4.08	=	53.04				
4.00 -< 4.33	12	×	3.58	=	42.96				
3.67 -< 4.00	4	×	3.20	=	12.80				
3.33 -< 3.67	1	×	2.91	=	2.91				
3.00 -< 3.33	3	×	2.67	=	8.01				
0.00 -< 3.00	0	×	2.29	=	0.00				
Students = 70 Expected points total = 332.29									

		2018/19	
Teaching set	Students	Score	Grad
11C/PHG	24	0.61	9
11T/PHG	19	0.64	8
11U/PHG	27	0.71	8

### **Comment:**

Successes, improvements in performance and strategies that have worked:

- Successes include:
  - The department has been stabilised, the organisation that was missing is now in place.
  - Full SOW, with integrated assessment and ROLL is in place and is showing the benefit in year 10.
  - Ensured year 11 (2018-2019) were entered for the appropriate exam and had covered the syllabus before they sat the exam.
  - QA/QI procedures are being used effectively to improve teaching and learning.
  - Required practicals at GCSE and CPAC at A level now conform with required standards.

Areas for development or concern:

- 3 to 4 boundary
- Pushing the higher attainers
- Evidence based best practice
- Concern: there has been a significant boundary shift and with 2 extremely diverse grade boundary setting is making predicting student outcomes very difficult
- Concern: this year we have lost 1 lesson per fortnight teaching time on each of the science subjects, meaning that we will struggle to cover the subject content with the new year 10 classes before the GCSE exams (2020/2021 leavers). Potential solution is that student receive 5 lesson per fortnight per GCSE in the next academic year.
- Concern: HOD has the largest timetable in the department and has been given a form, meaning time for QA/QI and intervention monitoring has been reduced and also as science is now timetabled in block, this reduces the time that HOD can observe teaching of science team, without getting cover.

### Targets and action planning

- Continue to embed the practice established last year.
- BEST science teaching being added into teaching and learning pedagogy to work towards recommendations of the EEF Improving secondary science.
- Targeted intervention is already in place (<u>T:\Science\Intervention\Intervention log 2019-2020.xlsx</u>) to tackle the ¾ boundary and higher attainers in Chemistry, Physics, also Biology (to a lesser extent).
- SLE support has been secured for Monday mornings 9-1.30 pm to support staff in using data to drive intervention and attainment.

### Year 11 Disadvantaged Analysis

### Comment:

In both Physics and Biology the disadvantaged student performed slightly lower than advantaged students. In chemistry there was no significant difference.

### Internal Tracking

### Year 10

Analysis of Summer 2018 PPEs.

### (PLEASE NOTE THESE WERE MADE USING THE 2017-2018 GRADE BOUNDARIES, BUT THERE HAS BEEN A SIGNIFICANT CHANGE IN 2018-2019)

Year 10 PPEs were internally and externally moderated.

### Biology/JWa

GCSE 9-1 (Att8 Points)																		
Name	9	8	7	6	5	4	3	2	1	0	U	x	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket 🐱
<u>10C/BiG</u>	0	0	0	<u>3</u>	1	<u>6</u>	<u>6</u>	<u>3</u>	2	0	0	0	0	21	3	3.48	0.90	21
<u>10T/BiG</u>	0	<u>2</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>3</u>	2	<u>6</u>	2	0	0	0	0	21	4	3.86	1.18	21
<u>10U/BiG</u>	<u>3</u>	2	4	<u>6</u>	<u>4</u>	<u>3</u>	0	0	0	0	0	0	0	22	6	6.32	2.22	22
Summary	3	4	5	10	9	12	8	9	4	0	0	0	0	64	5	4.58	1.44	64

#### GCSE - Biology - Overall

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#### All grades and Total actual points

### Expected points Avg prior achievement

5.67+

5.33 -< 5.67

5.00 -< 5.33

4.67 ~ 5.00

4.33 -< 4.67

4.00 -< 4.33

3.67 -< 4.00

3.33 -< 3.67

3.00 -< 3.33

0.00 << 3.00

Students = 64

2

9

12

19

9

6

4

2

1

0

21

19

24



### Chemistry/BHo

GCSE 9-1 (Att8 Points)																		
Name	9	8	7	6	5	4	3	2	1	0	U	x	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket ы
<u>10C/ChG</u>	0	0	0	0	0	0	<u>4</u>	<u>9</u>	<u>5</u>	0	<u>3</u>	0	0	21	2	1.67	-0.91	14
10T/ChG	0	0	0	0	<u>1</u>	<u>2</u>	<u>4</u>	<u>7</u>	<u>5</u>	0	2	0	0	21	2	2.10	-0.58	16
<u>10U/ChG</u>	0	<u>1</u>	<u>1</u>	1	<u>3</u>	2	2	0	0	0	<u>2</u>	0	0	22	4	3.86	-0.24	20
Summary	0	1	1	1	4	9	15	16	10	0	7	0	0	64	2	2.56	-0.57	50

#### **GCSE - Chemistry - Overall**

1.36

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9>7%

3.1%

19.Y10 Jul

0.55

0.63

0.55

0.50

0.57

Avg PA

4.77

9

8

9

9

9>5%

10.9%

Total actual = 164

64

5

59

13

51

#### Exp

Avg prior achievement

5.67+

5.33 ~ 5.67

5.00 < 5.33

4.67 < 5.00

4.33 -< 4.67

4.00 < 4.33

3.67 -< 4.00

3.33 -< 3.67

3.00 -< 3.33

0.00 -< 3.00

#### All grades and Total actual points

e	te	a	poi	n	ts	

-														
Students	×	Minimum Expectation	-	Total exp	Student	9	8	7	6	5	4	з	2	1
2	×	7.46	-	14.92	64	0	1	1	1	4	9	15	16	10
9	×	6.38	-	57.42	Points	× 9	× 8	× 7	× 6	× 5	× 4	× 3	× 2	× 1
12	×	5.48	-	65.76	Pts	0	8	7	6	20	36	45	32	10
19	×	4.71	-	89.49	- toolin							-		_
9	×	4.08	-	36.72			<b>C</b>	1			Ac	tual - I	Expected	đ
6	×	3.58	-	21.48			Sut	ojectiv	A SCOR	:= 1 +	1	Stude	nts × 5	-
4	×	3.20	-	12.80	<u> </u>									
2	×	2.91	-	5.82										
1	×	2.67	-	2.67				4	itudents	Score		rade	Students	So
0	ж	2.29	-	0.00	-			-f			-			-
	_				Overa			- 1						L 1

Female

Disadvantaged

Non-Disadvantaged

Male

Students = 64 Expected points total = 307.08

		19.Y10	
Teaching set	Students	Score	Grade
10C/CHG	21	0.49	9
10T/CHG	19	0.53	9
10U/CHG	24	0.63	8

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U X Q

×0 ×0 ×0

Grade

164 - 307.08

64 × 5

Students

Score

10 7 0 0

10 0 0 0

Score

9>1%

89.1%

9>4%

25.0%

+1= 0.55 grade 9

Grade

### 2 1.21 -- 90% 3 Students Score Grade 1.12 75% 4 1.06 - 60% 5 0.98 - 40% 6 0.92 25% 0.83 -- 10% 8 0.60 bottom 9

Alps

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### Physics/PWo

GCSE 9-1 (Att8 Points)

Name	9	8	7	6	5	4	3	2	1	0	U	x	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket 🐱
<u>10C/PhG</u>	0	0	0	0	0	7	<u>8</u>	<u>4</u>	2	0	0	0	0	21	3	2.95	0.37	21
10T/PhG	0	0	0	1	2	<u>3</u>	2	<u>5</u>	2	0	1	0	0	21	3	2.90	0.23	19
<u>10U/PhG</u>	0	<u>1</u>	1	<u>2</u>	<u>4</u>	<u>8</u>	<u>5</u>	0	0	0	0	0	0	21	4	4.48	0.33	21
Summary	0	1	1	3	6	18	20	9	4	0	1	0	0	63	3	3.44	0.31	61

#### GCSE - Physics - Overall

909

3

4

- 60%

5

- 40%

6

7

8

9

bottom

25%

0.93

0.84 -

0.62

\_

\_

Scarborough University Technical College | Janine.wade@scarboroughutc.co.uk | 09.09.19 | Filters: Overall

### .

5.67+

5.33-< 5.67

5.00 -< 5.33

4.67 -< 5.00

4.33 -< 4.67

4.00 -< 4.33

3.67 -< 4.00

3.33 -< 3.67

3.00 -< 3.33

0.00 -< 3.00

Students = 63

#### All grades and Total actual points

X	p	e	C	te	20	ŗ	00	ir	It	S		

2

9 ж

11 ×

19

9 ×

6

4 ×

2 ж

1 ×

0 ж

ts	× Minir	num Expectation	=	Total exp	Student	9	8	7	6	5	4	3	2	1	U	х	Q	9>1%	9>4%	9>5%	9>7%	Avg PA	
	×	7.46	=	14.92	63	0	1	1	3	6	18	0	9	4	1	0	0	98.4%	46.0%	17.5%	3.2%	4.76	1
	×	6.38	=	57.42	Points	× 9	× 8	× 7	× 6	× 5	× 4	3	× 2	× 1	× O	× 0	× 0		Tot	al actual :	217		
	×	5.48	-	60.28	Pts	0	8	7	18	30	72 (	i0	18	4	0	0	0						
	×	4.71	=	89.49																			
	×	4.08	=	36.72			Cub	inct 1	VA coor		Actua	I-E	xpected	- I		217 -	301.60		1 - 07	2 orada 8			
	×	3.58	=	21.48			Suc	Jecci	WA SCOT	e - 1 +	Stu	den	its × 5	-	_	63	3×5		1- 0.7	s graue o			
	×	3.20	=	12.80																			1
	×	2.91	=	5.82																	19.Y10 J	ul	
	×	2.67	=	2.67				5	Students	Score	Grad	le is	Students	Score		Grade	Student	s Score	Grade	Student	Score	Grade	1
	×	2.29	=	0.00	0			-			-	-			+			-		(2)	0.72		
					Overa				1											63	0.73	•	
E	pected	points total = 3	301.	60	Femal	e						Т			Т					5	0.71	8	
					Male			+	1.0			+			+					58	0.73	8	
								=		-	+	+			÷		-	+	+				i.
					Disad	vantag	ged	_	1.1			4	1		+	1			-	13	0.63	8	
	19.Y1(	D			Non-D	)isadv	antage	d	1.1	1.1	1.1			1.1			1.1	1.1		50	0.76	8	1
nts	Score	Grade																					
	0.75	8																					
	0.71	8																					
	0.74	8																					

19.Y10 Teaching set Score Students Grade 10C/PHG 21 0.75 8 10T/PHG 19 0.71 8 10U/PHG 23 0.74 8



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### Comment:

Successes, improvements in performance and strategies that have worked:

- Successes include:
  - The department has been stabilised, the organisation that was missing is now in place.
  - Full SOW, with integrated assessment and ROLL is in place and is showing the benefit in year 10.
  - o All students are being taught to the AQA triple Science syllabus.
  - QA/QI procedures are being used effectively to improve teaching and learning.

Areas for development or concern:

- 3 to 4 boundary
- Pushing the higher attainers
- Evidence based best practice
- Chemistry data is significantly lower than the other 2 science subjects, but we have secured a second chemistry teacher and support from a Chemistry specialist SLE
- Concern: there has been a significant boundary shift and with 2 extremely diverse grade boundary setting is making predicting student outcomes very difficult
- Concern: this year we have lost 1 lesson per fortnight teaching time on each of the science subjects, meaning that we will struggle to cover the subject content with the new year 10 classes before the GCSE exams (2020/2021 leavers). Potential solution is that student receive 5 lesson per fortnight per GCSE in the next academic year.
- Concern: HOD has the largest timetable in the department and has been given a form, meaning time for QA/QI and intervention monitoring has been reduced and also as science is now timetabled in block, this reduces the time that HOD can observe teaching of science team, without getting cover.
- Action: Significant grade boundary shifts have occurred and PPE results should be changed to reflect the higher thresholds.

### Targets and action planning

- Continue to embed the practice established last year.
- BEST science teaching being added into teaching and learning pedagogy to work towards recommendations of the EEF Improving secondary science.
- SLE support has been secured for Monday mornings 9-1.30 pm to support staff in using data to drive intervention and attainment

### Sixth Form @ Scarborough UTC

### Year 13

### **Subject Summary**

#### Alps 2019 @ Scarborough University Technical College | Janine.wade@scarboroughutc.co.uk | 09.09.19 | Filters: Overall Expected points All grades and Total actual points Avg prior achievement mum Expectatio Total exp A\* A в D Students С A\*>E% A\*>B% × Mir E U ж Q A\*>C% Avg PA 250.22 6.54 0 0 0 0 0 100.0% 100.0% 57,1% 7 0 2 2 3 7.0 -< 7.5 0 112.14 0.00 - 1 Points × 140 × 120 × 100 × 80 × 60 × 40 × 0 × 0 × 0 Total actual = 680 ld Ltd 6.7 -< 7.0 1 103.87 103.87 Pts total 0 240 200 240 0 0 0 0 0 1.09 6.4 -< 6.7 1 97.27 97.27 10 -6.1 -< 6.4 0 91.85 0.00 Actual - Expected 680 - 697.56 2 +1 = 0.97 grade 2 Subject VA score = 1 + = Students × 100 5.8-< 6.1 1 86.67 86.67 7 × 100 5.5 -< 5.8 81.60 81.60 1 0.97 - 90% 5.2 -< 5.5 1 77.93 77.93 2017/18 2018/19 3 0.00 4.7 -< 5.2 0 73.00 Grade Score Grade Score Grade 68.33 0.00 4.0 - 4.70 36 -0.47 Overall 0.97 0.92 2 - 75% 0.0 -< 4.0 64.44 0.00 0 -Female 0.95 Students = 7 Expected points total = 697.56 4 Male 0.47 0.96 Disadvantaged Non-Disadvantaged 0.47 0.88 60% 2018/19 Teaching set Score Grade udent 5 **13Y/PHAA** 7 0.97 2 alps.education 0.82 - 40% 6 0.78 25% 7 0.69 - 10% 8 0.39 bottom 9 Ap Different years may be using different benchmark data See the 'Alps Guide' for more information.

#### A - Physics - Overall

### **Comment:**

#### Successes, improvements in performance and strategies that have worked

• This year the results have been very positive, with a massive increase in ALPS score.

### Areas for development or concern

- We need to continue to embed the best practice and pedagogy established this year.
- Develop resources to fit the AQA Syllabus
- Continue to ensure we use all of the departmental resources, we have made huge stride towards this in the last academic year

#### Targets and action planning

- Because there has been a change of syllabus from OCR to AQA, the current year 13 will be the first year group through from AQA.
- We are almost certain to get another CPAC visit this year because of the syllabus change, in Biology or Chemistry and we need to prepare for this.

### Year 12

### **Subject Summary**

### Biology



#### A - Chemistry - Overall

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### Physics:

### ALPS CHART MISSING AS IT NEEDS CORRECTING

### **Comment:**

#### Successes, improvements in performance and strategies that have worked

- Successes include:
  - Full SOW, with integrated assessment and ROLL is in place and is showing the benefit in year 12.
  - All students are being taught to the AQA A level Science syllabus.
  - o QA/QI procedures are being used effectively to improve teaching and learning.
  - o Department passed CPAC practical endorsement

#### Areas for development or concern

We are again expecting a CPAC visit (from AQA this time). This will most probably be focussed on A level Biology or Chemistry.

CONCERN: Chemistry students are underachieving.

### Targets and action planning

- All staff will undergo CPAC refresher training
- SLE is being used to support A Level chemistry teaching



### Self-Evaluation cycle Examinations Analysis

- For Year Groups with External Results or heading to external results within one year (September 2019)

Subject area:

Mathematics

**Director Of Subject**:

<u>Hannah Smith</u>

### **Overview of External Results 2018**

### General:

**GCSE** Mathematics

- Throughout the autumn term the year 11 students were taught by a variety of supply teachers in mixed ability grouping with no director of subject. This was also the case up until Easter of year 10.
- In spite of this Mathematics remained a strong subject with students performing at least ½ a grade better in mathematics on average with a residual of 0.51.
- 4+ increased by 14% to 58.9%
- 5+ increased by 10.9% to 35.6%
- Though subject progress had improved by +0.15 subject progress was still not good enough with a progress index of -0.566 meaning students are still behind their counterparts at other schools

### A Level Mathematics

- Throughout the autumn term the year 13 students were taught by a variety of supply teachers with no director of subject. This was also the case up until Easter of year 10.
- Achieved 100% A\*-E, 70% A\*-C, 20% A\*-B
- Though subject alps score has improved by +0.17. Subject progress was still not good enough with an alps grade of 7 meaning they are still behind their counterparts at other schools

Level 3 Core Mathematics

- The Core maths students had a consistent diet of the same teacher over the course of the year.
- Consequently core maths result remained strong with continued improvement with the alps subject score improving by +0.16. As a consequence progress is good with an alps grade of 3 meaning the students perform better than 75% of their counterparts at other schools
- Achieved 100% A\*-E, 25% A\*-C

### **Key Stage 4 Results - Analysis**

### Grades 9 – 4 or equivalent Percentages - 58.9%

#### GCSE - Mathematics - Overall

Scarborough University Technical College | hannah.smith@scarboroughutc.co.uk | 18.09.19 | Filters: Year Group: 11

#### Expected points

2

#### All grades and Total actual points



### Year 11 Performance of Groups:

### **Analysis by Staffing**

Teaching set	Students	Score	Grade
11U/MAG	27	0.91	6
11Y/MAG1	26	0.86	7
11Y/MAG2	18	0.61	8

### Comment:

The groups are exactly what was expected and predicted. 11Y.MAG2 score is lower because of the type of characters it contained. Effectively all the disengaged students were put in to this group to allow 11Y.MAG1 to perform better. It is disappointing that they had not performed better but considering the inconsistencies in the teaching through their school experience it is not a surprise and was exactly as predicted.

#### Successes, improvements in performance and strategies that have worked:

You can clearly see that the setting of groups had a massive impact on attainment.

Mathematics GCSE	0.0	<u>1.4</u> ↓	<u>6.8</u> ↓	<u>19.2</u> †	<u>35.6</u> †	<u>58.9</u> †	<u>76.7</u> †	<u>89.0</u> †	<u>98.6</u> †	<u>98.6</u> †	<u>100.0</u>	100.0	100.0	73	4 <b>t</b>
Mocks >	0.0	2.7	8.2	16.4	26.0	39.7	58.9	83.6	94.5	94.5	100.0	100.0	100.0	73	3
Difference >	0.0	-1.4	-1.4	2.7	9.6	19.2	17.8	5.5	4.1	4.1	0.0	0.0	0.0	0	

Moving the average grade from a 3 to a 4 and 4+ from 39.7% to 58.9% a 67% increase.

#### Areas for development or concern:

The high attainers are not being stretched enough and consequently are not achieving the amount of 7+ that we would expect and their progress grades are poor.

#### Targets and action planning

Introduce a certificate in further mathematics to stretch and challenge the top end.

### Year 11 analysis by Sub-group

Female	-	-	-	-	-	-	-	-	-	19	0.79	8
Male	-	-	-	-	-	-	-	-	-	52	0.82	7

### Comment:

Girls were not as successful as boys in mathematics with a marginal gap of 0.03. A few key girls underperformed. We will ensure that appropriate interventions take place with HSM with key girls to ensure this does not happen again

### Year 11 Disadvantaged Analysis

### **Reference ALPS analysis**

Disadvantaged	-	-	-	-	-	-	-	-	-	21	0.74	8
Non-Disadvantaged	-	-	-	-	-	-	-	-	-	50	0.84	7

### Comment:

There is a 0.10 Different in Disadvantaged vs non disadvantaged the one to one tutor intervention for these pupils came too late to make a major impact on their grades with some students only having 2/3 tutor sessions.

### **Internal Tracking**

### Year 10

### Analysis of Summer 2018 PPEs.

### GCSE 9-1 (Att8 Points)

Name	9 %	9 - 8 %	9 - 7 %	9 - 6 %	9 - 5 %	9 - 4 %	9 - 3 %	9 - 2 %	9 - 1 %	9 - 0 %	9 - U %	9 - X %	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket % 🐱
10U/MaG	0.0	0.0	4.5	22.7	<u>36.4</u>	<u>95.5</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	100.0	100.0	100.0	22	5	4.59	0.49	100.0
<u>10y/MaG1</u>	0.0	0.0	0.0	0.0	<u>3.8</u>	<u>19.2</u>	<u>61.5</u>	92.3	<u>96.2</u>	96.2	100.0	100.0	100.0	26	3	2.73	-0.30	96.2
<u>10y/MaG2</u>	0.0	0.0	0.0	0.0	0.0	0.0	<u>6.3</u>	62.5	<u>87.5</u>	<u>87.5</u>	<u>100.0</u>	<u>100.0</u>	100.0	16	1	1.56	-0.41	87.5
Summary	0.0	0.0	1.6	7.8	14.1	40.6	60.9	97.5	95.2	95.2	100.0	100.0	100.0	64	2	2.09	-0.05	95.2

Students are already achieving a 40.6% pass rate of 4+ which shows an improvement on last year.

### Analysis by teacher

Predicted grades

Name	9 %	9 - 8 %	9 - 7 %	9 - 6 %	9 - 5 %	9 - 4 %	9 - 3 %	9 - 2 %	9 - 1 %	9 - 0 %	9 - U %	9 - X %	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket %
10U/MaG	<u>13.6</u>	27.3	72.7	<u>81.8</u>	90.9	<u>100.0</u>	<u>100.0</u>	100.0	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	100.0	100.0	22	7	6.86	0.69	100.0
<u>10y/MaG1</u>	0.0	0.0	0.0	<u>19.2</u>	50.0	<u>100.0</u>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	26	5	4.69	0.18	100.0
<u>10y/MaG2</u>	0.0	0.0	0.0	0.0	<u>6.3</u>	<u>43.8</u>	<u>93.8</u>	100.0	100.0	100.0	100.0	100.0	100.0	16	3	3.44	-0.04	100.0
0	4.7		05.0	25.0	50.4	05.0	00.4	400.0	400.0	400.0	400.0	400.0	400.0		-	5.40	0.00	400.0
Summary	4.7	9.4	25.0	35.9	53.1	85.9	98.4	100.0	100.0	100.0	100.0	100.0	100.0	64	5	5.13	0.30	100.0

### Comment:

### Successes, improvements in performance and strategies that have worked

Setting the students has again worked really well. Use of the TA to support the lower end should ensure a 100% pass rate.

### Areas for development or concern

We have not got enough students achieve on target at grades 4/5 I would like to run a 4/5 booster group for these students but finding time for this intervention is proving difficult in their timetable.

#### Targets and action planning

10U has been divided into 3 to support the top and lower end of this group.

### Year 10 analysis by sub-group

	ALL	Girls	Boys	FSM	All SEN	Statemented	EAL	AGT	BME	LAC	РР
No. of	64	5	59	10	5	0	0	0	0	0	5
pupils											
Target %	85.9%	100%	84.7%	80.0%	40.0%						84.6%
Grade 9 - 4											
% WAG	85.9%	100%	84.7%	60.0%	20.0%						69.2%
Grade 9 - 4											

### Comment:

We are doing well with girls/ boy and SEN students however there is still a gap between disadvantaged and non-disadvantaged this needs to be improved on.

### Year 10 Disadvantaged Analysis

	ALL	High PA	Mid PA	Low PA
No. of pupils	13	3	9	1
% Above SUTC Target			33.3	100.0
% On Target		100.0	44.4	
% Below Target			22.2	
% 2 or more below Target			11.1	

### Comment:

4 student are above target in mathematics and 3 are below all of them these students have been identified to RFE last term for PP Tutors and are in intervention groups for boosting their grade.

### Sixth Form @ Scarborough UTC

### Year 13

### Subject Summary

### A Level Mathematics

Expected points

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#### All grades and Total actual points

Avg prior achievement	Students ×	Minimum Expecta	tion =	Total exp	Students	A*	A	в	С	D	E	U	х	Q	A*>E%	A*>C9	6 A*>	-B%	Avg PA			-
7.5+	2 ×	125.11	=	250.22	9	0	1	1	5	1	1	0	0	0	100.0%	77.8%	22.	.2%	6.52			
7.0 -< 7.5	1 ×	112.14	-	112.14	Points	× 140	× 120	× 100	× 80	× 60	× 40	× 0	× 0	× 0		Total	actual =	720				
6.7 -< 7.0	1 ×	103.87	=	103.87	Pts total	0	120	100	400	60	40	0	0	0						1 16		100%
6.4 ~ 6.7	1 ×	97.27	-	97.27																1.10	' _	100%
6.1 × 6.4	0 ×	91.85	-	0.00		S	ubject \	/A score	= 1 + -	Actual -	Expected	= =	720 -	891.30	- +1	= 0.81	grade 7					2
55~58	2 ×	81.60		163.20						Studer	nts × 100	,	3,	100								
52-<55	1 ×	77.93		77.93		2017/18 2018/19																90%
4.7 -< 5.2	0 ×	73.00	=	0.00		2017/18 2018/19															12	
4.0 -< 4.7	0 ×	68.33	-	0.00			S	students	Score	Grade	Students	Score	Grade	Students	Score	Grade	Students	Score	Grade			
0.0 -< 4.0	0 ×	64.44	=	0.00	Overall			-	-	-	-	-		2	0.64	8	9	0.81	7	0.99		- 75%
					Female			-	-	-	-	-	-	-	-	-	1	0.75	8			
Students = 9	Exp	ected points tota	al = 891.	30	Male			-	-	-	-	-	-	2	0.64	8	8	0.82	7			4
														-		-						
					Disadvar	ntaged		-	-	-	-	-	-	-	-	-	-	-	-	0.04		6.0%
	2	018/19			Non-Disa	advanta	aged	-	-	-	-	-		2	0.64	8	9	0.81		0.90		
Teaching set	Students	Score Grade																				<b>E</b>
13Y/MAAF	9	0.81 7																				D
																				0.92	-	40%
																						6
																				0.00		
																				0.88	-	- 25%
																						7
																						1
																				0.80	-	- 10%
																						2
																						0
																				0.53	-	- bottom
																						9
<b>`</b>																						

Different years may be using different benchmark data. See the 'Alps Guide' for more information.
#### Level 3 Certificate in mathematical studies

#### Expected points

#### All grades and Total actual points

Avg prior achievement	Students	×	Minimum Expectation	=	Total exp
7.5+	0	×	57.50	=	0.00
7.0 -< 7.5	0	×	51.90	=	0.00
6.7 -< 7.0	0	×	46.94	=	0.00
6.4 -< 6.7	0	×	43.33	=	0.00
6.1 -< 6.4	1	×	39.09	=	39.09
5.8 -< 6.1	0	×	36.21	=	0.00
5.5 -< 5.8	1	×	32.94	=	32.94
5.2 -< 5.5	1	×	30.34	=	30.34
4.7 -< 5.2	1	×	27.33	=	27.33
4.0 -< 4.7	0	×	25.33	=	0.00
0.0 -< 4.0	0	×	30.00	=	0.00

		2018/19	
Teaching set	Students	Score	Grade
13Y/MCASF	4	1.00	3

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#### Comment:

#### Successes, improvements in performance and strategies that have worked

#### **A Level Mathematics**

- Subject alps score has improved by +0.17.
- The securing of a qualified NQT specialist teacher and the return of the direct of subject provided the structure needed to increase the mock grades from only 40% A\* to E to 100% A\*-E, 70% A\*-C, 20% A\*-B

#### **Level 3 Core Mathematics**

- The Core maths students had a consistent diet of the same teacher over the course of the year.
- Consequently core maths result remained strong with continued improvement with the alps subject score improving by +0.16. As a consequence progress is good with an alps grade of 3 meaning the students perform better than 75% of their counterparts at other schools
- Achieved 100% A\*-E, 25% A\*-C

#### Areas for development or concern

#### **A Level Mathematics**

- Throughout the autumn term the year 13 students were taught by a variety of supply teachers with no director of subject. This was also the case up until Easter of year 10.
- Subject progress was still not good enough with an alps grade of 7 meaning they are still behind their counterparts at other schools.
- By tightening up classroom routines and planning appropriate interventions and ensuring students have quality wave one teaching with plenty of exam practise

#### **Level 3 Core Mathematics**

• Integrate a more employer real life focus to this course.

#### Targets and action planning

Tightening up classroom routines and planning appropriate interventions and ensuring students have quality wave one teaching with plenty of exam practise

## Year 12

# **Subject Summary**

#### Expected points

#### All grades and Total actual points

Α

2

240

× 140 × 120

Students

12

Points

Overall

Female

Disadvantaged

Non-Disadvantaged

Male

Pts total 280

A\*

2

Avg prior achievement	Students	×	Minimum Expectation	=	Total exp
7.5+	1	×	125.11	=	125.11
7.0 -< 7.5	1	×	112.14	=	112.14
6.7 -< 7.0	1	×	103.87	=	103.87
6.4 -< 6.7	1	×	97.27	=	97.27
6.1 -< 6.4	1	×	91.85	=	91.85
5.8 -< 6.1	1	×	86.67	=	86.67
5.5 -< 5.8	3	×	81.60	=	244.80
5.2 -< 5.5	1	×	77.93	=	77.93
4.7 -< 5.2	2	×	73.00	=	146.00
4.0 -< 4.7	0	×	68.33	=	0.00
0.0 -< 4.0	0	×	64.44	=	0.00

Students = 12 Expected points total = 1,085.64

		19.Y12	
Teaching set	Students	Score	Grade
12X/MAAF	12	1.01	3

2



Different years may be using different benchmark data. See the 'Alps Guide' for more information.

## All grades and Total actual points

Students ×	Minimum Expec	ctation =	Total exp	Students	A	в	С	D	E	U	х	Q	A>E%	A>C%	A>	B%	Avg PA			_
0 ×	57.50	=	0.00	10	0	5	5	0	0	0	0	0	100.0%	100.0%	50	.0%	4.13			
0 ×	51.90	=	0.00	Points	× 60	× 50	× 40	× 30	× 20	× 0	× 0	× 0		Total a	actual =	450		1	_	
0 ×	46.94	=	0.00	Pts total	0	250	200	0	0	0	0	0							10	
0 ×	43.33	=	0.00															-  1	.19 —	100%
0 ×	39.09	=	0.00		Subiec	t VA score	e = 1 +	Actual -	Expected		450 -	275.98	- +1	= 1.35 g	rade 1					2
0 ×	36.21	=	0.00					Studer	nts × 50		10	× 50								
0 ×	32.94	=	0.00															1	.04 —	90%
0 ×	30.34	=	0.00			_	_	_	_	_	_	_				19.Y12	Jul	_		2
2 ×	27.33	=	54.66			Students	Score	Grade	Students	Score	Grade	Student	s Score	Grade	Students	Score	Grade			5
4 ×	25.33	=	101.32	Overall		-	-	-	-	-	-	-	-	-	10	1.35	1	- o	.95 —	- 75%
4 ^	50.00	-	120.00						· · · · · ·		1									
Expe	ected points to	otal = 275	98	Female		-	-	-	-	-	-	-	-	-	1	1.45	1			
				Male		-	-	-	-	-	-	-	-	-	9	1.34	1			4
				Disadvanta	aged	-	-	-	-	-	-	-	-	-	-	-	-	7		
	0.1/1.0			Non-Disad	vantaged	-	-	-	-	-	-	-	-	-	10	1.35	1	0	.86 —	60%
Students	9.Y1Z	7																-		_
10	1 35 1	-																		5
10	1.55																			<u> </u>
																		•	80	40%
																		0	.00 —	
																				0
																		0	.74 —	25%
																				-
																		0	69	10%
																			.00 —	10%
																				8
																				l ·
																		0	.58 —	- bottom
																				0
																				9
		_																		
		[			Diffe	erent yea	rs may b	e using d	ifferent b	penchma	ark data.									
						See the	e 'Alps G	uide' for	more inf	ormatio	n.									

#### Expected points Avg prior achievement Students × Mi 7.5+ 0 ×

7.0 -< 7.5

6.7 -< 7.0

6.4 -< 6.7

6.1 -< 6.4

5.8 -< 6.1

5.5 -< 5.8

5.2 -< 5.5

4.7 -< 5.2

4.0 -< 4.7

0.0 -< 4.0

Students = 10

Teaching set 12X/MCASF

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#### Comment:

Successes, improvements in performance and strategies that have worked

• Students are performing well in mathematics across the board. More consistent teaching for the student throughout the latter half of the year has led to an improvement in results

#### Areas for development or concern

• Year 13 lesson allocation for mathematics has dropped compensating for this additional personal study may have an effect on results.

#### Targets and action planning

• Integrate more exam practise into lessons using good practise from KS4 of Race to the staples.



# Self-Evaluation cycle Examinations Analysis – For Year Groups with External Results or heading to external results within one year (September 2019)

Subject area: Engineering

**Director of Subject**: Rob Shephard

# **Overview of External Results 2019**

# General:

Pupils performed significantly better in 2019 than in 2018 improving the ALPS grade for manufacture from a low 6 to a 3 and from 41% (manufacture) 30% (design) to 59% (manufacture) and 42% (design) for 4+. Pupils continued to perform better in manufacture than design, this is partly due to inconsistent staffing in the subject. The results within Engineering Manufacture were lower than expected due to the moderator's adjustment reducing the 4+ from 71% to 60%. The changes are being investigated and a potential contest being raised. To ensure the rigour of assessment in the future the manufacture tracker and assessment method has been updated in line with the above feedback. Results improved this year due to changes in delivery for year 10, intensive intervention and much greater use of trackers and unit recording sheets.

Both design and manufacture pupils have started coursework in year 10 allowing the appropriate number of guided learning hours along with the practical activities to continue to develop technical excellence and skills.

The results in Design were as expected in the last data drop and had accurate moderation results, the lower results in this subject were caused by absence of the key staff delivering design. The manufacture course completing sooner allowing for intensive intervention and utilisation of the additional systems time for further intervention mainly on manufacture.

# **Key Stage 4 Results - Analysis Grades 9 – 4 or equivalent Percentages**

100% -	Grade Breakdown for CAMNAT Certificate in Engineering Design Centre Proportion Vs OCR National Proportion	2019	Design
80% -		Number of pupils	69
60% - 40% -		Total 9-4 (L2D* - L2P)	42%
20% -	22,0% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\% 23,0\%	SUTC (base) target 9-4 (L2D*	95.8%
	*2 D2 M2 F2 D1 M1 P1 U  Centre proportion OCR National proportion	- L2P)	
	Grade Breakdown for CAMNAT Certificate in Engineering Manufacture Centre Proportion Vs OCR National Proportion	+/-	-53.8%
80% -		Prediction (L2D* - L2P)	42.6%
60% - 40% -		Total L2D* - L1P	97.1%
25% -	1729 H.09 H.99 H.99 H.99 H.99 H.99 H.99 H.9	National average (L2D* - L2P)	51.1%
	*2 D2 M2 P2 D1 M3 P1 U Centre proportion CR National proportion	Total U	2.9%



Manufacture

71

59.2%

95.8%

-36.6%

74.6%

97.2%

53.4% 2.8%

Total L1D	10.1%	15.5%

# Year 11 Performance of Groups:

## **Analysis by Staffing**

Manufacture

		2017/1	8 🔁		2018/19 🖻					
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA		
RS	81	0.60	6	4.51	69	0.88	3	4.71		

Teaching Set

	2018/19 🕿									
	Students	Score	Grade	Avg PA						
11Z/EMC121C	18	0.77	4	4.76						
11Z/EMC122D	18	0.97	2	4.64						
11Z/EMC123A	16	0.98	2	4.51						
11Z/EMC124B	17	0.79	4	4.92						

#### Comment:

### Successes, improvements in performance and strategies that have worked:

Note: All engineering design is taught by NGR and manufacture by RSH

In Eng Design 41% of pupils achieved or exceeded their target grade in group D, 21% in B and 19% in C. In Manufacture this was 47% in A, 25% in B, 32% in C and 45% in D. Within manufacture significantly more pupils met and exceeded their target grades. Both Design and Manufacture had significantly improved residuals over last year due to targeted intervention of U / P1 and D1 / P2 pupils. Significant intervention was utilised within Manufacture and Design, within lessons, during school, after school and in holiday sessions. This worked best when clearly communicated with parents. Pupils were given a clear list of 'jobs' to do and small group targeting was a benefit.

### Design

		2017/1	8 🔁		2018/19 🎓					
	Students	Score	Grade	Avg PA	Students	Avg PA				
NG	81	0.62	-	4.51	67	0.68	-	4.74		

Teaching Set

	2018/19 🕿								
	Students	Score	Grade	Avg PA					
11Z/EDC121B	18	0.61	-	4.76					
11Z/EDC122C	17	0.70	-	4.72					
11Z/EDC123D	16	0.89	-	4.51					
11Z/EDC124A	16	0.52	-	4.98					

Lower ability pupils made better progress in Design with a residual of 0.1 compared to a negative residual for middle and upper ability pupils. In Manufacture middle and higher ability pupils made better progress (0.82 and 0.80). However, across the courses there are no significant gaps. This may be due to the use of mixed sets and the development of differentiated tasks with clear challenge tasks for pupils. The gap in comparison to the national average for Design has been significantly reduced this year, from 27% to 9%.

97% of pupils achieved a grade in both Design and Manufacture; this was a direct result of the development plan from last year, which included starting coursework in year 10, mixed ability sets and targeted intervention (significant underperformance, high attainers, L1D / L2P boarder and the U / L1P). This approach has been applied to new year 11 to continue the successes of the plan. Design in year 10 and 11 had inconsistent staffing due to supply staffing following staff leaving and illness. This made ongoing monitoring and progress difficult. Manufacture delivered in year 10 and 11 was delivered by a specialist teacher who is experienced in the qualification and was able to significantly improve outcomes.

Predictions of the qualifications overall were accurate across subjects, however moderation reduced marks in R111.

#### Areas for development or concern:

Systems and control had to be withdrawn due to staffing concerns – specialist teacher employed in the new year however, has a lot of work to cover in year 11.

Design grades were affected by inconsistent staffing and staffing illness, there is a probability this will continue into this academic year due to staffing issues experienced in year 10 for the current year 11.

The use of design orientated technical skills will be used with the new intake of year 10 with a specialist teacher to raise engagement, knowledge and skills in preparation for coursework launch in the spring term.

Marking of R111 in Manufacture was adjusted during moderation; this needs to be addressed on the tracker and ensure compliance in future submissions. The procurement of software and additional external validation will also aid this.

Design results (L2D\* - L2P) were 9% lower than national average however this is 3 times better than last year.

Middle ability pupils (based on KS2 banding) in design groups failed to make the expected progress and on average achieved 2 grades below target. Higher attainers made better progress however were still one grade below on average. It could be suggested that these pupils didn't have the time to revisit all work and stretch their marks.

### Targets and action planning

- Employment of specialised and experienced Design and Systems teachers
- All engineering coursework started in year 10
- Development of technical skills course in year 10 to develop understanding and increasing engineering contact time
- New staff to undertake training on OCR CamNat qualifications
- Progress and attainment tracking system in place across the department to monitor grades and submissions on a regular basis
- Increased departmental standardisation, moderation and external validation
- Ensure all pupils in all groups have access and opportunities to higher level / challenge work and are encouraged to complete them, including intervention.
- Ensure all pupils have access to exemplar work (different projects, but used to model work of different levels)
- Organise focussed intervention to ensure L1D/L2P and U/L1P border pupils attempt and complete all aspects of coursework tasks.
- If pupils do not submit work, make desired progress in lessons or are significantly below target, interventions are taking place such as additional support, communication home, detentions and 'catch up club'. These interventions are conducted either during lessons, breaks, LPD / PE time or after school, this is then recorded on the department intervention log.

Year 11 Design analysis by Sub-group

	ALL	Girls	Boys	FSM	All SEN	Statemented	EAL	AGT	BME	LAC	РР
No. of pupils	69	20	49	17	3						17
Target % Grade 9 - 4	95.8	100	94.2	95	100						95
Actual % Grade 9 - 4	42.0	45	40.8	29.4	0						29.4

# Year 11 Manufacture analysis by Sub-group

	ALL	Girls	Boys	FSM	All SEN	Statemented	EAL	AGT	BME	LAC	РР
No. of pupils	71	20	51	18	3						18
Target % Grade 9 - 4	95.8	100	94.2	95	100						95
Actual % Grade 9 - 4	59.2	65.0	56.9	55.6	66.7						55.6

#### Comment:

- The cohort had a significantly greater number of males than females, however girls did better across the subject areas, as is the national trend. Both boys and girls performed better in manufacture than design.
- FSM and PP pupils attained better results in manufacture than Design, however overall results for FSM pupils achieved less than the non FSM pupils.
- A significantly higher proportion of SEN pupils performed better in manufacture than design.

## Year 11 Disadvantaged Analysis

### Design

		2017/1	8 🔁			2018/1	9 🔁	
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA
All	81	0.62	-	4.51	67	0.68	-	4.74
Female	15	0.85	-	4.45	19	0.72	-	4.71
Male	66	0.57	-	4.53	48	0.66	-	4.76
Disadvantaged	7	0.53	-	4.10	17	0.61	-	4.82
Non-Disadvantaged	74	0.63	-	4.55	50	0.70	-	4.72

## Manufacture

		2017/1	8 🞓			2018/1	9 🔁	
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA
All	81	0.60	6	4.51	69	0.88	3	4.71
Female	15	0.85	3	4.45	19	0.96	2	4.71
Male	66	0.54	6	4.53	50	0.84	4	4.71
Disadvantaged	7	0.33	8	4.10	19	0.78	4	4.69
Non-Disadvantaged	74	0.62	6	4.55	50	0.91	3	4.72

#### Comment:

#### **Coursework – controlled assessment**

Comment: Pupils performed equally well across all units of the Manufacture specification with nearly 70% of pupils achieving a level 2 pass or more in each coursework unit. Within Design, pupils achieved better in R108 with 45% of pupils achieving a level 2 pass or more. The other two units performed at a similar level with 36% and 26% for R106 and R107 respectively.

# **Internal Tracking**

Year 10 Analysis of Summer 2019 prediction vs base.

Name	D*2 %	D*2 - *2 %	D*2 - D2 %	D*2 - M2 %	D*2 - P2 %	D*2 - D1 %	D*2 - M1 %	D*2 - P1 %	D*2 - U %	D*2 - X %	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket % 🐱
Engineering Design C12	0.0	0.0	<u>9.5</u> ↓	<u>33.3</u> ↓	<u>71.4</u> <b>↓</b>	<u>93.7</u> ↓	<u>98.4</u> ↓	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	100.0	63	P2 🕹	4.28 🕹	-0.55 🕹	74.6 🕹
Base Targets >	0.0	0.0	20.6	76.2	96.8	100.0	100.0	100.0	100.0	100.0	100.0	63	M2	5.42	1.27	96.8
Difference >	0.0	0.0	-11.1	-42.9	-25.4	-6.3	-1.6	0.0	0.0	0.0	0.0	0		-1.14	-1.82	-22.2
Engineering Manufacture C12	<u>3.1</u> †	<u>3.1</u> †	<u>12.5</u> †	<u>43.8</u> †	<u>78.1</u> †	<u>96.9</u> †	<u>98.4</u> †	<u>100.0</u> †	<u>100.0</u> †	<u>100.0</u> †	100.0	64	P2 🕇	4.63	-0.20 🕇	92.2 🕇
Base Targets >	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	64	Х		-4.14	0.0
Difference >	3.1	3.1	12.5	43.8	78.1	96.9	98.4	100.0	100.0	100.0	0.0	0			3.94	92.2
Engineering Systems Control C12	0.0	0.0	<u>6.7</u> <b>†</b>	<u>36.7</u> †	<u>70.0</u> <b>†</b>	<u>91.7</u> †	<u>98.3</u> †	<u>100.0</u> †	<u>100.0</u> <b>†</b>	<u>100.0</u> <b>†</b>	100.0	60	P2 🕇	4.25	-0.53 🕇	78.3 <b>†</b>
Base Targets >	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	60	Х		-4.11	0.0
Difference >	0.0	0.0	6.7	36.7	70.0	91.7	98.3	100.0	100.0	100.0	0.0	0			3.58	78.3
Summary	1.1 🕈	1.1 🕈	9.6 <b>†</b>	38.0 <b>†</b>	73.3 <b>†</b>	94.1 🕈	98.4 <b>†</b>	100.0 🕈	100.0 🕈	100.0 🕈	100.0	187	P2 🕈	4.39 🕹	-0.42 🕇	81.8 🕇
Base Targets >	0.0	0.0	7.0	25.7	32.6	33.7	33.7	33.7	33.7	33.7	100.0	187	P1	5.42	-2.30	32.6
Difference >	1.1	1.1	2.7	12.3	40.6	60.4	64.7	66.3	66.3	66.3	0.0	0		-1.03	1.88	49.2

## Analysis by teacher

#### Comment:

The data has been based on the PPE set in May of year 10 and in combination with some of the coursework set so far.

I have concerns about the accuracy of the information due to staffing inconsistencies, illness and non-specialist teachers leading the classes.

I have concerns about the quantity of coursework submitted by students in the run up to the PPE's for the reasons above, which is being assessed, corrected and remarked in the autumn term by subject specialists.

### Successes, improvements in performance and strategies that have worked

Coursework has been formally started in year 10 allowing much more time for pupils to complete work whilst allowing time to prepare for their examinations.

New qualification and technical skills curriculum time to embed and reinforce knowledge for examinations has been implemented with current year 10s.

Technical skills deployment has had a great impact on pupils' knowledge and understanding of various skills and techniques, helping them to further engage with the engineering curriculum.

Comprehensive and accurate data tracking systems embedded in the coursework QA/QI process, enabling staff and students to see attainment and progress.

### Areas for development or concern

At this stage in the course, new Y11 examination scores are on average a Level 1 merit / distinction for manufacture, which is lower than we hope to achieve by the end of the course, however, it must be noted that there has been a heavy focus on preparation for coursework assessments and skills building as was the same with the previous year 11's.

Accuracy of current grade requires investigation due to staffing changes and justification for these grades being unknown. Reliance on PPE results for predicted and current grade may have been too high when only 25% of the final grade is from the examination.

Due to staffing in systems and design the current progress for all students is of concern as very little coursework has been completed in year 10. However, experienced specialist members of staffs have been appointed to deliver and assess all of the required material. Intensive intervention for design was also held at the end of year 10.

Lower ability pupils have completed significantly less work than required and to a lower standard than other students. Early wave intervention is already happening in the department with specified time planned to catch up and act on feedback for coursework assessment. After this has been completed targeted intervention will take place with specific students to undertake specific tasks and study.

### Targets and action planning

- Time / intervention built into planning in year 11 for additional work and completion of year 10 coursework units.
- Clear deadlines made known to staff and pupils. This then allows staff time to intervene towards the end of the qualification in addition to other points throughout the year.
- Employment of specialised and experienced design and systems teachers
- All engineering coursework started in year 10
- Implemented technical skills course in year 10 to develop understanding and increasing engineering contact time
- New staff to undertake training on OCR "CamNat" qualifications
- Progress and attainment tracking system in place across the department to monitor grades and submissions on a regular basis
- Ensure all pupils in all groups have access and opportunities to higher level / challenge work and are encouraged to complete them.
- Ensure all pupils have access to exemplar work (different projects, but used to model work of different levels)
- Organise focussed intervention to ensure higher and middle attainers attempt and complete all aspects of coursework tasks aiming for mark band three level work.
- Development and deployment of employer based projects to increase attainment and engagement.

	ALL	Girls	Boys	FSM	All SEN	Statemented	EAL	AGT	BME	LAC	PP
No. of pupils	63	20	57	10	18						25
Target % Grade 9 - 4	96.8	100	100	100	100						100
% WAG Grade 9 - 4	19	45	29.8	40	46.6						28

## Year 10 analysis by sub-group Design

	ALL	Girls	Boys	FSM	All SEN	Statemented	EAL	AGT	BME	LAC	РР
No. of pupils	62	20	57	10	18						25
Target %	21	100	100	100	100						100
Grade 9 - 4											
% WAG	31.2	30	31.6	40	23.5						24
Grade 9 - 4											

## Year 10 analysis by sub-group Manufacture

## Year 10 analysis by sub-group Systems

	ALL	Girls	Boys	FSM	All SEN	Statemented	EAL	AGT	BME	LAC	РР
No. of pupils	59	20	57	10	18						25
Target % Grade 9 - 4	5.1	100	100	100	100						100
% WAG Grade 9 - 4	50.6	54	52.6	60	47.1						28

#### **Comment:**

Within engineering the working at grade is very difficult to judge from the coursework as it is broken down in to tasks which equate to points; it is only when all tasks are completed a true working at grade can be judged.

The working at grade detailed above is a combination of the P.P.E. results and coursework handed in to date.

The Design and Systems results are not accurate from the standard and quantity of work handed in from year 10. This is due to it being assessed by non-specialist teachers.

# Year 10 Disadvantaged Analysis

ps 🛛 Staff weekly bulletins 🖉 Engine	ering team	. 📔	Classroom	C Cambridge	Nationa	Cambridge Te	echnic 🌖	SISRA Analytics	- E 🏊 E	BlueSky Educat	tion 🔏 Alps Al	ps Connec	t 📥 Pr	ofile - Das	hboard		~
Name	Pupil Premium	D*2	D*2 - *2	D*2 - D2	D*2 - M2	D*2 - P2	D*2 - D1	D*2 - M1	D*2 - P1	D*2 - U	D*2 - X	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket 。
Engineering Design C12	All	0	0	1	<u>3</u>	<u>12</u>	<u>25</u>	<u>42</u>	<u>55</u>	<u>63</u>	<u>63</u>	63	63	M1 🕹	2.27 🕹	-0.86 🕹	41 🕹
Base Targets >		0	0	13	48	61	63	63	63	63	63	63	63	M2	5.42	1.27	61
Difference >		0	0	-12	-45	-49	-38	-21	-8	0	0	0	0		-3.15	-2.13	-20
	No	0	0	1	<u>2</u>	<u>9</u>	<u>22</u>	<u>35</u>	<u>46</u>	<u>50</u>	<u>50</u>	50	50	D1 🕹	2.38 🕹	-0.85 🕹	33 🕇
Base Targets >		0	0	10	37	49	50	50	50	50	50	50	50	M2	5.39	1.20	48
Difference >		0	0	-9	-35	-40	-28	-15	-4	0	0	0	0		-3.01	-2.05	-15
	Yes	0	0	0	1	<u>3</u>	<u>3</u>	Z	<u>9</u>	<u>13</u>	<u>13</u>	13	13	M1 🕹	1.85 🕹	-0.90 🕹	8 🕇
Base Targets >		0	0	3	11	12	13	13	13	13	13	13	13	M2	5.54	1.54	13
Difference >		0	0	-3	-10	-9	-10	-6	-4	0	0	0	0		-3.69	-2.44	-5
Engineering Manufacture C12	All	0	0	1	<u>3</u>	<u>13</u>	<u>26</u>	41	<u>56</u>	<u>62</u>	<u>62</u>	62	62	D1 🕇	2.35	-0.79 🕇	47 <b>†</b>
Base Targets >		0	0	0	0	0	0	0	0	0	0	62	62	Х		-4.15	0
Difference >		0	0	1	3	13	26	41	56	62	62	0	0			3.36	47
	No	0	0	1	3	<u>10</u>	22	35	<u>46</u>	<u>49</u>	<u>49</u>	49	49	D1 🕇	2.48	-0.76 🕇	39 <b>†</b>
Base Targets >		0	0	0	0	0	0	0	0	0	0	49	49	Х		-4.19	0
Difference >		0	0	1	3	10	22	35	46	49	49	0	0			3.42	39
	Yes	0	0	0	0	<u>3</u>	4	<u>6</u>	<u>10</u>	<u>13</u>	<u>13</u>	13	13	M1 🕇	1.85	-0.90 🕇	8 <b>†</b>
Base Targets >		0	0	0	0	0	0	0	0	0	0	13	13	Х		-4.00	0
Difference >		0	0	0	0	3	4	6	10	13	13	0	0			3.10	8
Engineering Systems Control C12	All	0	0	0	0	3	6	18	41	59	59	59	59	P1 🕇	1.25	-1.85 🕇	11 🕇
Base Targets >		0	0	0	0	0	0	0	0	0	0	59	59	Х		-4.11	0
Difference >		0	0	0	0	3	6	18	41	59	59	0	0			2.26	11
	No	0	0	0	0	3	6	14	<u>34</u>	46	<u>46</u>	46	46	P1 🕇	1.35	-1.86 🕇	10 🕇
Base Targets >		0	0	0	0	0	0	0	0	0	0	46	46	Х		-4.14	0
Difference >		0	0	0	0	3	6	14	34	46	46	0	0			2.28	10
	Yes	0	0	0	0	0	0	4	7	13	13	13	13	P1 🕇	0.90	-1.84 🕇	1 1
Base Targets >		0	0	0	0	0	0	0	0	0	0	13	13	Х		-4.00	0
Difference >		0	0	0	0	0	0	4	7	13	13	0	0			2.16	1

#### Comment:

9	www.sisraanalytics.co.uk 🗙 🛛 🕍 Alps	Connect	×   🖪	Classwork for 10C Eng	jineering M $ imes$	SISRA Analytics - 1	9/20 (Current 🗅 🗙	TE ExoMars R	over Vehicle mech	nanica 🗙 📔 🕂		- 0	$\times$
$\leftarrow$	→ C A israanalytics.co.uk/EA	PReports/Grades/	ComparisonMat	rix/6/20/70/0?scrol	IPsn=438&expo	rt=False						☆ 👎	3
A	pps 💵 Staff weekly bulletins 💵 Engineerir	ig team 🖪 Cl	assroom 🖸 Ca	mbridge Nationa	C Cambridge Teo	chnic 🌖 SISRA Ar	nalytics - E	BlueSky Educatio	on 🔏 Alps Cor	nnect 📥 Profile	e - Dashboard		
•	Base Targets Grade 2 In	A8 Basket	¥ (	CNA V2 V	Not Availab	Hide	· [ ·		•		On O On Tr Belov	r Above ack v Track	
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	Invert Axes					Mocks	5						
												ummary	
	Base Targets	x	U	P1	см 0	L D1	P2	M2	D2	*2	D*2	N	
	x			0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
	M1	0	0	0	0		0			0	0	0	
	D1		1		0	0	1	0	0	0	0	2	
	P2		4	3	4	2	0	0	0	0	0	13	
	M2	0	<u>3</u>	<u>10</u>	Z	9	5	1	0	0	0	35	
	D2				<u>6</u>	2	3	1	1	0	0	13	
	*2									0	0	0	
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	Summary	0	8	13	17	13	9	2	1	0	0	63	
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	<b>\$</b> 19.	Y10 Pred S	Sum1
	Entries 🜩	Score ¢	Grade 🖨
Cam Nat Award - Engineering Design	31.5	0.90	-
Cam Nat Cert - Engineering Manufacture	64	0.97	2
Cam Nat Cert - Systems Engineering	60	0.89	3

### Students CURRENTLY 2 grades or more below the SUTC Target Grade

Within Design 82% of pupils are currently 2 grades or more below their SUTC target. Within Manufacture and systems targets are not active on Sisra. However, internal data monitoring as 80% of pupils are 2 grades below target based on PPE examination scores. Alps prediction data suggests that engineering manufacture predictions are a grade 2, which is an improvement on 2019 year 11 Alps score.

Current grade data are based on a PPE and coursework completed to date, which in design and systems has been delivered and assessed by a non-subject specialist and is currently being recovered and reassessed. A number of these pupils will be not be a cause for concern as grades will increase as coursework is completed. However, it will be vital to continue data collections within the department in order to identify those pupils who are not rapidly moving towards their target grade. Intervention will be put into place and recorded on the department intervention log at the earliest opportunity.

# Sixth Form @ Scarborough UTC

# Year 13

# Subject Summary

Extended Cert	2019
No of pupils	2
Avg grade	D*
Residual	15.7

Diploma	2019
No of pupils	9
Avg grade	D
Residual	2.4

Ext. Diploma	2019
No of pupils	3
Avg grade	D-
Residual	-1.5

	EC	Di	ED
% Prediction A*-B			
Result % A*-B	100	44.4	22.2
ALPS % Prediction A*-E	100	100	100
Result A*-E	100	100	100



#### 2016 Cam Tec Dip - Engineering

OVERVIEW

STUDENTS OUTCOMES FINE GRADES SAVED

		2017/1	8 🔁			9 🔁	•		
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA	
All	5	0.49	-	5.19	9	0.82	-	6.42	
Female	-	-	-	-	1	1.07	-	7.85	
Male	5	0.49	-	5.19	8	0.78	-	6.24	
Disadvantaged	-	-	-	-	-	-	-	-	
Non-Disadvantaged	5	0.49	-	5.19	9	0.82	-	6.42	

#### Teacher

		2017/18 🔁				2018/1	9 🎓	
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA
RS	-	-	-	-	8	0.89	-	6.57
(Missing teacher)	-	-	-	-	1	-	-	-

#### 2016 Cam Tec Ext Dip - Engineering

OVERVIEW	STUDENTS	OUTCOMES	FINE GRADES	SAVED
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		2017/18 🖻				2018/19 🔁			
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA	
All	2	0.23	-	5.38	2	0.63	-	5.88	
Female	-	-	-	-	1	0.95	-	6.13	
Male	2	0.23	-	5.38	1	0.31	-	5.62	
Disadvantaged	-	-	-	-	-	-	-	-	
Non-Disadvantaged	2	0.23	-	5.38	2	0.63	-	5.88	

#### Teacher

		2017/18 😂			2018/19 🔁 Students Score Grade			
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA
RS	-	-	-	-	2	0.63	-	5.88

#### Successes, improvements in performance and strategies that have worked

Large amounts of intervention had been offered across the units, which some pupils took advantage of, regular communication with parents supported this. Additional hours timetabled for all year 13 groups in January, this brought the guided learning hours in line with the qualification requirements.

Specialist staff utilised and redeployed on units where issues in quality of teaching and learning was observed (legacy staff and supply staff)

Adjustments to the qualifications pathway allowed underperforming students to be refocussed on a qualification they were closer to achieving. Such as delivery of extended certificate units in year 12.

Use of highly detailed unit and pupil tracker to monitor attainment and progress. This was also used to target intervention to improve grades.

### Areas for development or concern

Students had four terms with lower than required guided learning hours.

Units were delivered by non-specialist teachers with little consistency which made accurate assessment difficult in the initial part of the year.

Moderated work examples and sample assessment tasks were not available in year 12 so teachers were unsure of the requirements and procedures around assessment.

Not all pupils undertaking the qualification had the desired or required GCSE grades necessary to successfully pass the courses offered at level 3.

## Targets and action planning

Employment of two specialist teachers to deliver key units

Timetable to give pupils required hours per unit

Specialist resit lessons timetabled for pupils under achieving in unit 1,2,3 & 4.

Earlier recognition and review of the course choices

Moderated work and delivery guides available to all staff

Department CPL time used to ensure all staff are confident in assessment procedures and standardisation to ensure accurate and validated results

Intervention to take place for pupils who haven't achieved or completed their year 12 work.

OCR based training to be undertaken by teaching staff in the department to ensure accurate assessment and delivery of units. Development and deployment of employer based projects to increase attainment and engagement.

## Year 12

## Comment:

Successes, improvements in performance and strategies that have worked

More specialist teachers now delivering units.

Additional time on the timetable for all units.

Employer based projects being used in units to increase engagement.

Detailed unit feedback from moderator, used to further develop unit content and delivery.

SUTC candidate unit work used as exemplars for OCR.

Development and use of highly detailed tracker to monitor unit and pupil progress.

#### Areas for development or concern

Units were delivered by non-specialist teachers with little consistency which made accurate assessment difficult in the initial part of year 12.

Not all pupils undertaking the qualification had the desired or required GCSE grades necessary to successfully pass the courses offered at level 3, as evident in summer examination results. For example in Principles of mechanical engineering are lower than predicted.

Maths for engineering examination not sat due to work experience, so pupils are having to have more hours in year 13 to prepare them for this.

## Targets and action planning

Department wide trackers to be deployed and utilised including a whole cohort overview tracker

Pupil progress trackers on all unit folders

Embedding employer based projects in units

Timetable rewrite to allow timetabled resit sessions, delivered by specialist staff.



Self-Evaluation cycle

# **Examinations Analysis**

- For Year Groups with External Results or heading to external results within one year (September 2018)

Subject area: English Literature and English Language

Director Of Subject: Miss Annabelle Atkinson

## **Overview of External Results 2018**

## General:

Context:

This cohort was taught in Y10 by two teachers who were both inadequate. As DOS I inherited the top set (U) and mixed set (T), whilst KGr took the other mixed set (C).

Ultimately, we had approximately 8 months to teach them both Language and Literature.

The cohort had significant behavioural issues across the college, meaning that attendance to lessons was (for some) erratic. Moreover, the attitude to learning required improvement for the majority of the cohort.

My initial goal as DOS was to get 60% in Literature, and 55% IN Language. This was based on the time remaining, prior knowledge and current knowledge of the cohort. However, after an intensive Autumn term, and a set of February PPEs, I felt that I could push for 71% 9-4 across the two GCSEs. Indeed, I met this target.

		2017/18			2018/19	
Subject 🗸	Entries 🖨	Score 🖨	Grade 🖨	Entries 🖨	Score 🖨	Grade 🖨
A - Computer Science	6	0.37	8	3	0.98	3
A - Mathematics	2	0.64	8	9	0.81	7 .
A - Physics	2	0.47	8	7	0.97	2
AS - Use of Mathematics	11	0.84	5	4	1.00	3
16 CT Ext Cert - Engineering	7	0.30	-	2	1.28	1
16 CT Dip - Engineering	10	0.49	-	18	0.82	-
16 CT Ext Dip - Engineering	6	0.23	-	6	0.63	-
GCSE - Biology ngular Snip	23	0.68	8	70	0.66	8
GCSE - Chemistry	23	0.61	9	30	0.71	8
GCSE - Computer Science	-	-	-	70	0.47	8
GCSE - English Language	81	0.69	8	84	0.81	8
GCSE - English Literature	81	0.74	8	71	0.92	6
GCSE - Geography	81	0.63	8	69	0.59	8

# Key Stage 4 Results - Analysis

**Grades 9 – 4 or equivalent Percentages** 



#### Year 11

**Performance of Groups:** 

#### 11 U- ALPS 4

100% Pass rate

Average Grade 6

### **Evaluation:**

## 9-7 pass rate

Students' attitude to learning was RI, which turned to 'Good' for most and some 'Outstanding'. However, those who were 'Good' did not challenge themselves enough. Surveys showed that the majority of students were most confident in English, and as a result focussed more on weaker subjects, much to the detriment of our 9-7 % result.

Moreover, the lack of rigorous whole-college Independent Study made motivating the students to revise very difficult.

It is crucial students revise for Literature, due to the extensive texts studied and having closed-book linear exams. Indeed the exam board advised teachers to promote better and more revision for students in the future.

Time was a huge issue. 8 months to cover texts; extended writing skills; working under timed conditions (as well as teaching the Language course alongside) was almost an impossible task. Work experience and the impact it had on PPEs, lost us valuable time (although I do understand the importance of this). Furthermore, 90% of the Y11 timetable was during in the afternoon. Not only did this make teaching difficult (students were tired and often arrived from chaotic lessons) it was also impacted by many charity events where lessons were disrupted.

## 9-4 pass rate

This is due to rigorous teaching- challenging and stretching the students beyond the basic requirements. GCSE pod was more suited to the mixed ability groups, and therefore my challenging lessons and resources on Google Classroom were invaluable. Those that accessed them performed well, but those that did not failed to either reach or exceed their target.

**Areas of Development:** Rigorous setting of, and checking of Independent Study.

More recall in class.

#### 11T- ALPS grade 5

Ave. grade: 4

I am actually extremely pleased with the results from what was a very challenging group due to attitude to learning; attendance issues; whole-college behavioural issues; and genuine weaknesses in English.

**Overall:** Students' attitude to learning was RI, which turned to 'Good' for most and some 'Outstanding'. However, those who were 'Good' did not challenge themselves enough. Surveys showed that the majority of students were most confident in English, and as a result focussed more on weaker subjects, much to the detriment of our 9-7 % result.

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### **Areas of Development:**

Rigorous setting of, and checking of Independent Study. More recall in class. 11C- ALPS: 8 Ave. grade: 3

I am disappointed, but not shocked with this result. In fact, more students passed than I had anticipated, which is positive news. This group mirrored T, yet throughout the year were consistently a grade below that of T.

Problems: Teacher absence; unsuitable timetabling; poor attitude to learning.

Moreover, 3 students were utterly disinterested and did not even bother to write in the exams. This was mirrored across all subjects.

Actions: All cover needed was mostly taken by me when able; sometimes at the sacrifice of my Y10 class and even Y1U class. I communicated my concerns and suggested that I take this group over at Christmas. This idea was rejected on the grounds of my own well-being, which I do understand. However, it did mean our results took a hit.

Instead of taking the teaching, I produced excessive resources, as well as GCSE Pod, right up until the day of the exam to ensure that those students, who had a good attitude to learning, had a fighting chance.

**Results:** There is no doubt that the rigour of the additional resources helped move some students to a pass or close to one.

Areas of Development: Rigorous setting of, and checking of Independent Study.

More recall in class.

Address teacher absence

## **Analysis by Staffing**

		2018/19	
Teaching set	Students	Score	Grade
11C/ELG	24	0.81	8
11T/ELG	20	0.97	5
11U/ELG	27	0.99	4

#### Kim Garrett: 11C

**Concerns:** Severe teacher attendance directly impacted the class' progress, and this impacted negatively on the other Y11 groups due to the extra work put on the Director of Subject.

KGR's additional two roles (Sixth Form Development Manager and Whole-College Literacy Lead) negatively impacted on the quality of teaching and time devoted to 11C. There were clear gaps in subject knowledge, as well as a lack of extensive marking and feedback.

**Targets and action planning:** Due to my success with 11T, I will take the two mixed ability groups. KGr will keep 11U so she can focus on stretching them without distraction.

Provide books to improve subject knowledge, and resources created by DOS.

Introduction of Assessment Books to ensure KGR allows students to practice extended writing.

Provide modelled examples of marking and feedback expectations

		2017/1	8 18		2018/19 🎓			
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA
All	81	0.74	8	4.51	71	0.92	6	4.71
Female	15	0.97	5	4.45	19	1.07	3	4.71
Male	66	0.69	8	4.53	52	0.87	7	4.71
Disadvantaged	7	0.65	8	4.10	21	0.82	7	4.69
Non-Disadvantaged	74	0.75	8	4.55	50	0.97	5	4.72

Teacher

		2017/18 🖻					19 18	
	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA
AA		-	-	-	47	0.98	4	4.90
KGR	-	-	-	-	24	0.81	8	4.33

**Comment:** Girls outperformed boys hugely (ALPS 3 compared to ALPS 8).

**Reasons:** The girls in this cohort had a good attitude to learning, and therefore were better focussed in lessons.

This male cohort included huge BESD concerns, which negatively affected their progress. Attendance of the boys was much lower, and many were often in isolation or truanting. Their behaviour across college was inadequate, and this affected English: we would have to deal with issues that had occurred during the day P5 and P6 every day. This is not conducive to learning; it is really no surprise that the boys did not perform as well as the girls.

Also, KGR only taught 5 of the female cohort. After analysis of staffing performance, this may also have had an impact

## Year 11 Disadvantaged Analysis

The 7 disadvantaged students did not perform as well as the non-disadvantaged: ALPS 5 compared to ALPS 8.

#### Comment:

The disadvantaged students had whole-school problems, which affected their progress in English. Due to lack of time, English was unable to intervene as much as necessary to ensure these students made the same progress.

However, one student achieved two Grade 9s (her only ones in college), two others met targets meaning there is real potential for English to build on the success of PP students.

# **Internal Tracking**

# Year 10

# Analysis of Summer 2018 PPEs.

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For more information, please visit our	(nowledge	Base.		<u>190011</u>								
Subjects 🚔	👽 19.)	F	2018/1	9	Difference 🚖							
Subjects +	Entries	Score	Grade	Entries	Score	Grade	Difference V					
GCSE - Biology	64	1.13	3	70	0.66	8	-0.47 🔶					
GCSE - Chemistry	64	0.95	6	30	0.71	8	-0.24 🔶					
GCSE - Computer Science	38	1.03	2	70	0.47	8	-0.56 🔶					
GCSE - English Language	65	1.08	2	84	0.81	8	-0.26 🔶					
GCSE - English Literature	- English Literature 64 1.08 3 71 0.92 6 -0.16					-0.16 🕹						
GCSE - Geography	32	0.88	5	69	0.59	8	-0.29 🕹					
GCSE - Mathematics	64	1.07	2	77	0.80	8	-0.27 🕹					
GCSE - Physics	64	1.03	5	70	0.65	8	-0.37 🕹					
Cam Nat Award - Engineering Design	31.5	0.90	-	33.5	0.68	-	-0.22 🔶					
Cam Nat Cert - Engineering Manufacture	64	0.97	2	69	0.88	3	-0.09 🗸					
	connect/monitoring/trends/difference furder ♥ Home / Twitter	Connect/monitoring/trends/difference Nurder ♥ Home / Twitter      English Teaching Re      Star      Trends     Difference     C     For more information, please visit our Knowledge      GCSE - Biology     64      GCSE - Chemistry     64      GCSE - Computer Science     38      GCSE - English Language     65      GCSE - English Literature     64      GCSE - Geography     32      GCSE - Mathematics     64      GCSE - Physics     64      GCSE - Physics     64      GCSE - Physics     64      GCSE - Physics     64      Gam Nat Award - Engineering Manufacture     64	connect/monitoring/trends/difference Nurder ♥ Home / Twitter ♥ English Teaching Re ● Starter Packs - Trends Difference © For more Information, please visit our Knowledge Base. Subjects ♦ (* 19./10 Pred Entries Score GCSE - Biology 64 1.13 GCSE - Chemistry 64 0.95 GCSE - Computer Science 38 1.03 GCSE - Computer Science 38 1.03 GCSE - English Language 65 1.08 GCSE - English Language 65 1.08 GCSE - English Laterature 64 1.08 GCSE - Geography 32 0.88 GCSE - Geography 32 0.88 GCSE - Physics 64 1.07 GCSE - Physics 64 1.03 Cam Nat Award - Engineering Design 31.5 0.90 Cam Nat Cert - Engineering Manufacture 64 0.97	tonnect/monitoring/trends/difference Nurder ♥ Home / Twitter      English Teaching Re      Starter Packs - Dou      Trends     Difference      C     For more information, please visit our Knowledge Base.      C     For more information, please visit our Knowledge Base.      C     For more information, please visit our Knowledge Base.      C     GCSE - Biology     64     1.13     3     GCSE - Chemistry     64     0.95     6     GCSE - Computer Science     38     1.03     2     GCSE - English Language     65     1.08     2     GCSE - Geography     32     0.88     5     GCSE - Geography     GCSE - Mathematics     GCSE - Physics     GCSE - Physics     GCSE - Physics     Gam Nat Award - Engineering Manufacture     64     0.97     2	tonnect/monitoring/trends/difference          Nurder       Home / Twitter       Image: English Teaching Re       Starter Packs - Dou         Trends       Difference         Image: Starter Packs - Dou         Image: Im	tonnect/monitoring/trends/difference Nurder ♥ Home / Twitter	State Packs - Dou         Index / Writer Image English Teaching Re Image State Packs - Dou         Image Image Image State Packs - Dou         Image Image Image Image State Packs - Dou         Image Image Image Image Image State Packs - Dou         Image	Subjects ◆	Some       Y Home / Twitter       Iteracting Re       Iteration is stater Packs - Dou         Index       Difference       Stater Packs - Dou       Scarborough Universite         Image: Image	Connect/monitoring/trends/difference       Image: Base States Packs - Dou         Image: Imag	Connect/monitoring/trends/difference       Image: Im	Connect/monitoring/trends/difference

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# Analysis by teacher

# Predicted grades

GCSE - English Language	0.69	8	4.58	70	1.06	3	4.79	65	1.08	2	4.76
10C/EAG	-	-	-	22	1.01	3	4.52	21	0.98	4	4.51
10T/EAG	-	-	-	22	1.03	3	4.51	20	0.99	4	4.47
10U/EAG	-	-	-	26	1.12	2	5.26	24	1.23	1	5.22
GCSE - English Literature	-	-	-	70	1.07	3	4.79	64	1.08	3	4.77
10C/ELG	-	-	-	22	1.05	3	4.52	21	1.08	3	4.51
10T/ELG	-	-	-	22	1.03	3	4.51	19	1.02	4	4.47
10U/ELG	-	-	-	26	1.11	2	5.26	24	1.14	2	5.22

# Year 10 analysis by sub-group

Name	9	8	7	6	5	4	3	2	1	0	U	x	Other	Total Grades	Average Grade	Average Points	Residual	In A8 Basket 🐱
10C/ELG	0	0	0	Z	<u>5</u>	<u>4</u>	<u>4</u>	1	0	0	0	0	0	21	5	4.62	0.60	21
10T/ELG	0	1	0	<u>5</u>	<u>1</u>	<u>11</u>	<u>2</u>	1	0	0	0	0	0	21	5	4.52	0.31	20
10U/ELG	2	2	Z	Z	1	<u>3</u>	0	0	0	0	0	0	0	22	6	6.45	0.28	20
Summary	2	3	7	19	7	18	6	2	0	0	0	0	0	64	5	5.22	0.39	61
	19.Y11 Jul Sum1 👽				10 Aut1 👽				19.Y10 Pred Sum1 👽									
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	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA	Students	Score	Grade	Avg PA						
All	71	0.94	5	4.71	70	1.07	3	4.79	64	1.08	3	4.77						
Female	19	1.02	4	4.71	7	1.22	2	5.13	5	1.27	1	5.04						
Male	52	0.91	6	4.71	63	1.05	3	4.75	59	1.07	3	4.74						
Disadvantaged	21	0.88	6	4.69	14	1.02	4	4.69	13	1.13	2	4.70						
Non-Disadvantaged	50	0.97	5	4.72	56	1.08	3	4.81	51	1.07	3	4.78						