



Millthorpe
school

Getting the Best Out of Targets



Information for
Teaching Staff

Estimates, Targets, Predictions

FFT

The Fischer Family Trust (FFT) is a charitable organisation established by Mike Fischer whose fortune was created through the company Research Machines – a major supplier of IT to British schools over the last 40 years. They provide free data services to UK schools and to the National Health Service.

In Education, they provide estimates of likely future performance and indicators which schools can use to self-evaluate their performance. They are a very small organisation and work in conjunction with local authorities to support their service.

Estimates

- The FFT provides estimates for each student of their likely future attainment.
- It does this by using information from many thousands of students in the past and linking attainment at one age (e.g. GCSE results at 16) with attainment at a previous age (e.g. KS2 SAT results at 11).
- At KS3, the FFT provides for each student the percentage chance of getting each of levels 2 to 7 (or better) and the most likely level (and sublevel) for English, Maths & Science.
- At KS4, the FFT provides for each student the percentage chance of getting each grade for 26 GCSE subjects. They also show the most likely grade. They do not give estimates for non-GCSE subjects e.g. BTEC. The KS4 estimates can be based on KS2 SAT results or KS3 teacher assessments.
- At KS4 the FFT also provide estimates for whole school indicators such as 5 A*-C including English & Maths or levels of progress in English and Maths.
- BUT – the FFT database may not hold all students and some students didn't take KS2 tests, so it can't provide estimates for everybody.
- ALSO – estimates are not prophecies. Just because **many** students progressed from a particular KS2 score to a such-and-such a GCSE outcome doesn't mean that **this** student with their particular circumstances is destined to follow suit.
- The FFT uses a range of models for estimates of which 3 are common:
 - **FFT-A** - to make expected progress based on prior attainment, month of birth & gender of the students
 - **FFT-B** as FFT-A but also taking into account the socio-economic background of the school
 - **FFT-D** as FFT-B but raised so that if achieved, the school would be in the top 25% of similar schools for value-added
- In Millthorpe we use **FFT-B for evaluating** our progress. For **aspirational targets** we have found FFT-D is not challenging enough so we use an estimate based on the top 15% of schools which we have called **FFT-E**.

Targets

Everybody hates targets that someone else has set for them. They chip away at a sense of self-control. At Millthorpe, targets have to be agreed with the person responsible for achieving them, whether that is a student, a subject teacher, a Head of Department or the Headteacher.

No target should just be a copy of the relevant FFT estimates.

Research suggests that around 50% of the final grade is predictable by knowing a student's previous attainment. The other 50% is determined by the quality of teaching, the support of the home, the determination of the student and other factors.

The purpose of a target is to motivate a person into higher achievement.

This is so important, I'll write it again.

The purpose of a target is to motivate a person into higher achievement.

Always remember this if you are helping a student arrive at a target or you are negotiating a performance management target with a teacher.

It is important that any achievement target is both realistic and aspirational if it is to motivate a person into higher achievement.

At Millthorpe we never use the targets a teacher negotiates with their students to evaluate a teacher's performance. We use the estimates from FFT to do this. That is why a teacher can encourage a student to aim high without being afraid of being penalised for it should the student fall a little short of a target. Aim high without fear.

Predictions

Predictions are made by teachers of the final outcomes of students in KS4 or the current level of attainment in KS3.

In KS4 our tracking is a forward prediction of the likely attainment of each student at the end of Year 11, taking into account their current quality of work, their level of effort and the maturation that the rest of the course will bring. We use grades like C1, C2 & C3 where C3 is a low C etc.

In KS3, our tracking is our best judgement of their current KS3 attainment in sub-levels. We use grades like 6a, 6b & 6c where 6c is a low level 6 etc.


By examining our predictions against estimates or targets, we can identify any students failing to make good progress and act to improve things.

Aspiration Charts at KS4

We take the FFT estimates and put them into bar-charts to make them easier to use. We provide bar-charts of estimates grouped by class for teachers and by student for teachers to use.

Student charts – example

Students get estimates of 24 GCSE subjects as follows ...

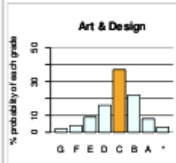
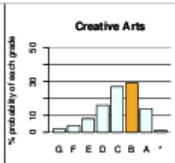
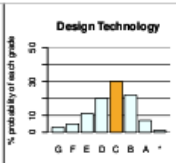
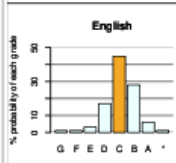
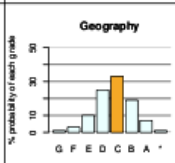
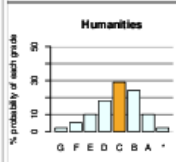
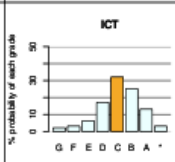
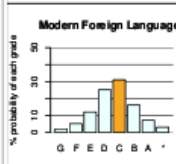
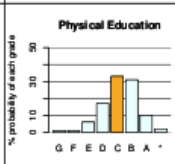


from data to information to improvement

Aspiration Charts dated 5th September 2012


FFT type D GCSE estimates for David Cook, 10A

12 main subject groups

These estimates from the Fischer Family Trust are based on whether you are a boy or girl, and when in the year you were born, your interests or your effort. Discuss these estimates with your teacher. A suitable target might be for each of your subjects. These type D estimates are what students in the top quarter of schools might achieve if they were in your school.

Example School
page 7 of 38

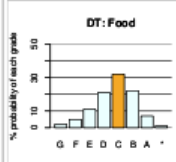
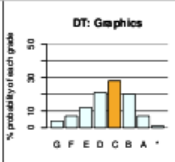
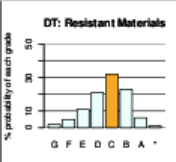
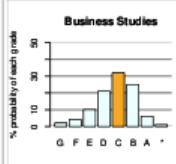
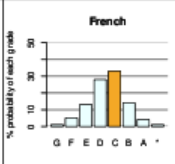
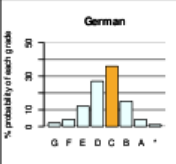
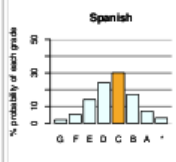
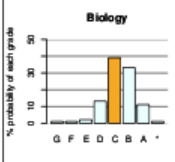
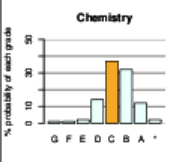
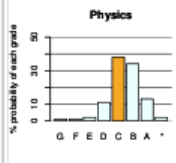
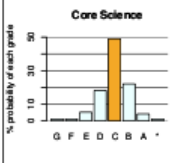
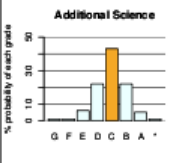


from data to information to improvement

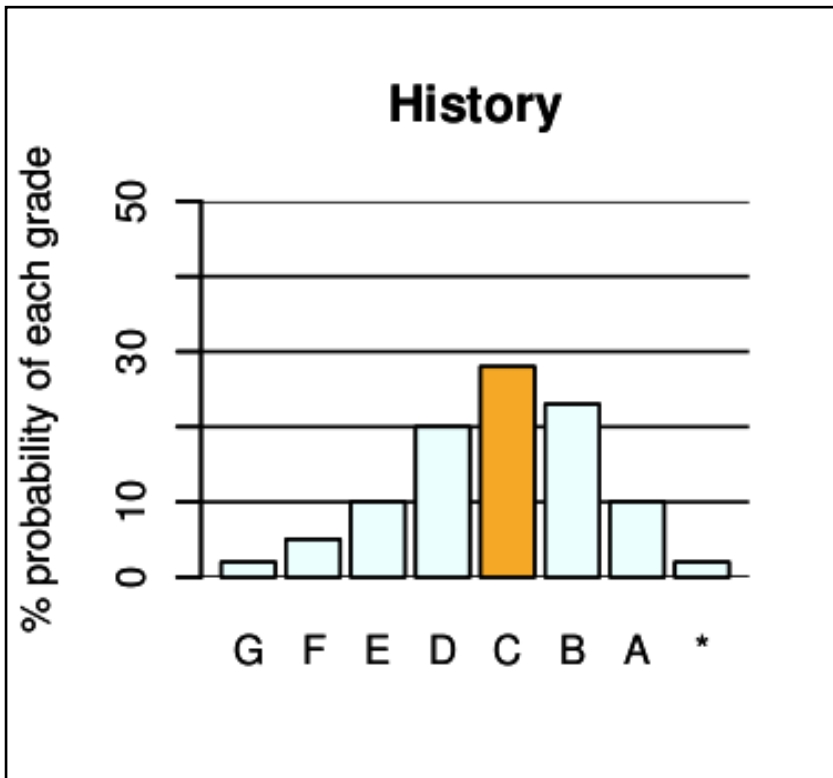
Aspiration Charts dated 5th September 2012

FFT type D GCSE estimates for David Cook, 10A

12 specific subjects

Example School
page 8 of 38
FFT-D estimates for GCSEs in 2014



Each subject is a bar-chart:

Note that the most likely grade (here a C) is coloured orange.

This bar-chart is based on FFT-E estimates so already contains aspiration.

Look at the probability of a C – it is about 28%.

Now check the probability of B, A and A* - they are about 23%, 10% and 2%. So the probability of getting above a C is 35% - there is more chance of getting above a C than a C! Of course, that leaves 37% chance of getting below a C.

Above a grade C – 35% chance

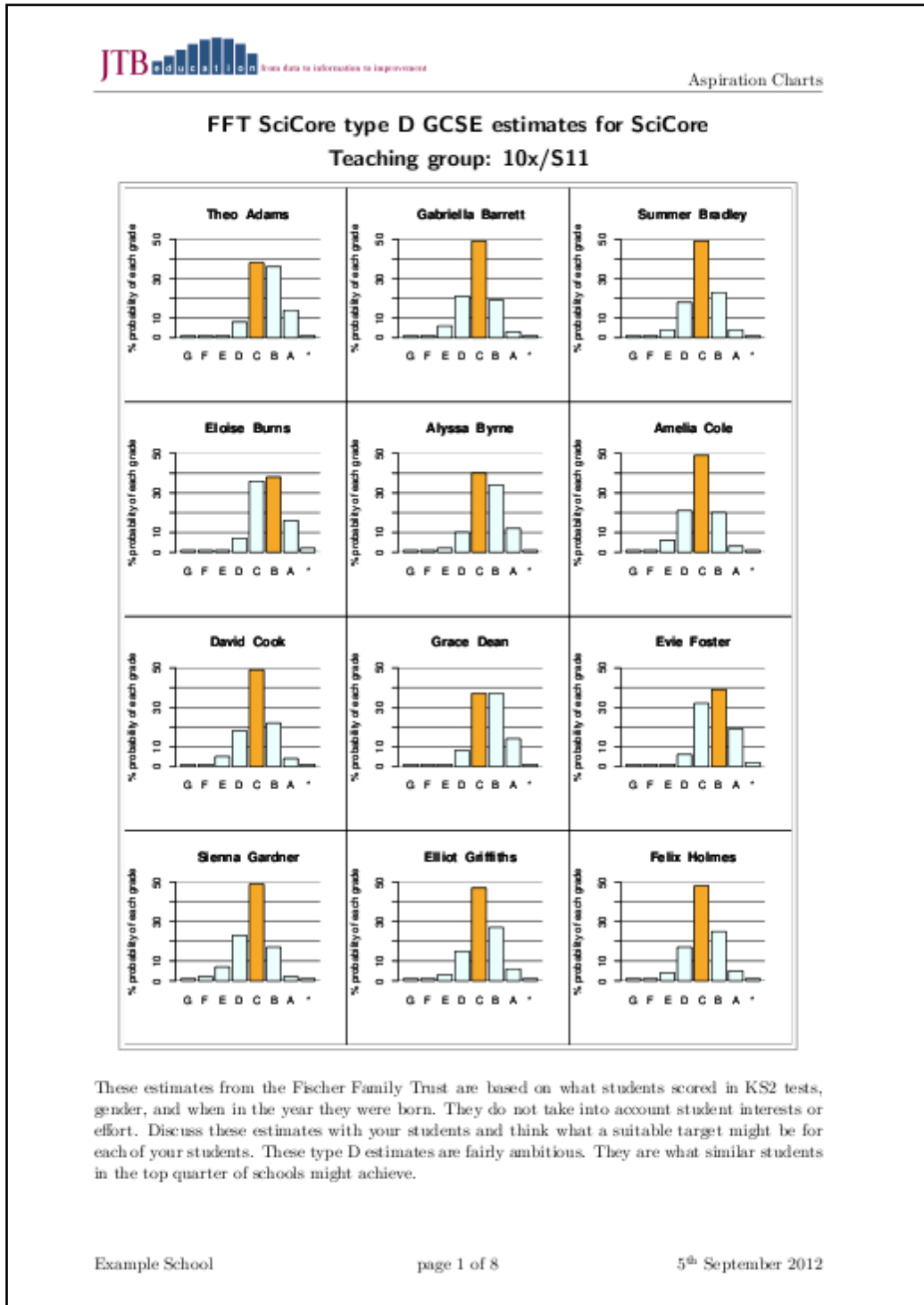
Grade C – 28% chance

Below a grade C – 37% chance

The key question is what grade would the student like to achieve? With your guidance, the student can set a SMART target – achievable and realistic, but also with a degree of aspiration.

Teacher/Class charts

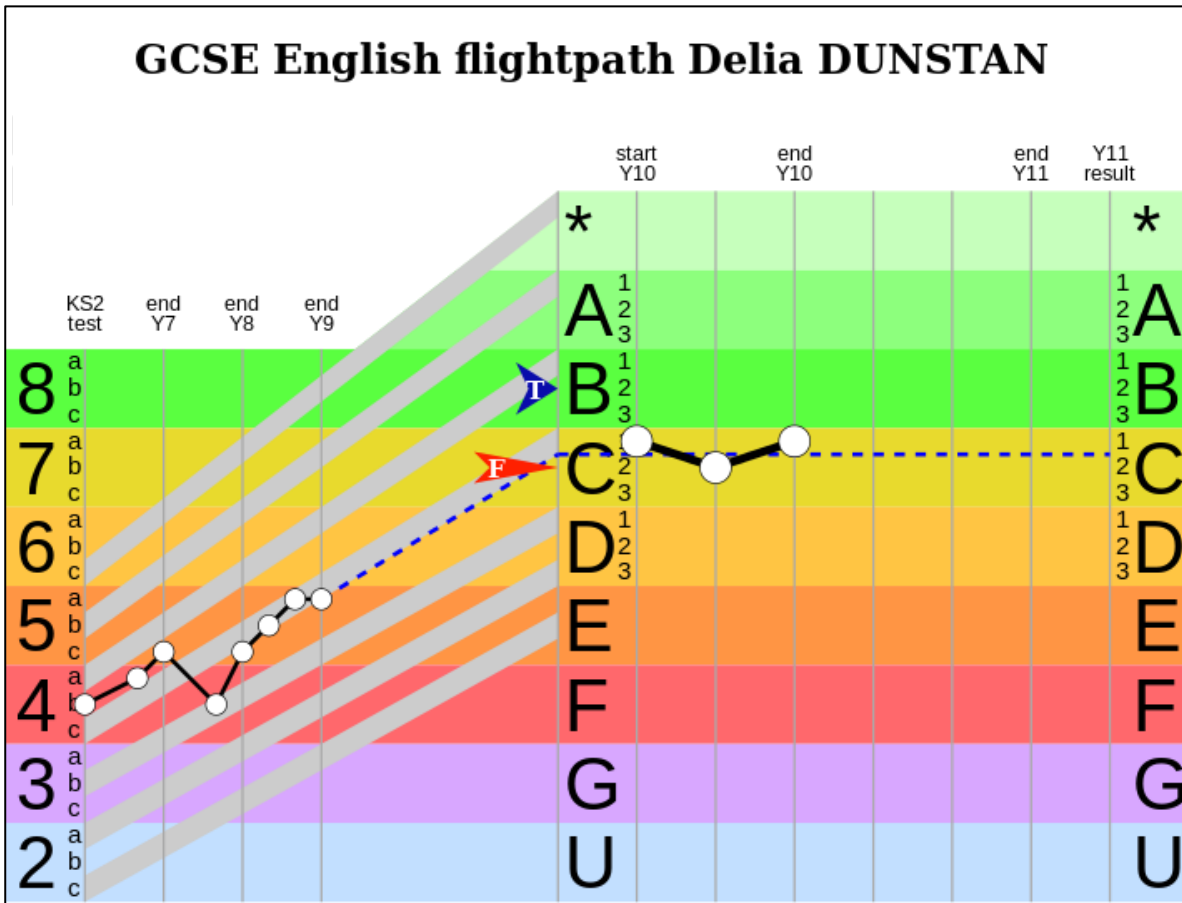
These are just like the student charts except they show all the students' charts in your class, for your subject:



Thus the class teacher and the student have access to the same information.

Flight Paths

A problem with aspiration charts is that FFT base their estimates on the end of Key Stage 2 results in English & Maths. This was three years before GCSE courses start, so what about progress in between? To help with this, we use a second document – the flight path. There is one for each subject and it shows how well a student has progressed during Key Stage 3. Here’s an example ...



Delia ended Year 6 with a 4b in English. The grey bands are the flight paths and her Key Stage 3 tracking grades are shown as small white discs. Delia began between two flight paths and stayed on track during Year 7, but fell below during Year 8. By the end of Year 9, she had regained most of the drop to end one flight path below where she started. The flight paths have been designed to indicate good progress, not just progress in line with national norms, so Delia has made fairly good progress.

From her final 5a grade at the end of Year 9, the dotted line indicates that good progress to GCSE would suggest she should reach a top C grade. In fact, Delia has negotiated a target of B (as shown by the blue arrow), above her FFT estimate of C (as shown by the red arrow).

During the target-setting process of course, there will not be a blue arrow available!

Throughout Years 10 & 11, Delia’s tracking grades are shown as large white discs. She has been a fairly secure C throughout but hasn’t yet reached her target of a B.

KS4 student target-setting at Millthorpe

The process

Student targets must be ASPIRATIONAL.

Student targets must MOTIVATE STUDENTS.

Therefore, targets must be negotiated and engage students in thinking about their successful futures.

1. Students are introduced to the aspiration charts and flight paths in assembly. All the uncertainties are explained as well as the vital role effort and determination play in achievement.
2. They are encouraged to think about what grade they would like to aim at in each of their subjects and parents are encouraged to discuss this at home.
3. After a short time, they then meet with their subject teachers to negotiate their target.
4. Subject teachers add negotiated targets into our SIMS pupil database.

The role of form tutors

Encourage students to think hard about their targets. Make sure they are included in their planner in pencil before they negotiate with subject teachers.

Explain again where needed all the uncertainties covered in their assembly and help them with individual issues.

Discuss individually how some subjects might be important for their career aspirations. Link achievement in school to their intended careers, however changeable those might be.

Emphasise how important English & Maths will be for their long-term future.

The role of subject teachers

Set work for the whole class while you meet individually with each student.

The meeting should be brief as each will already know what target they would like. In most cases, one lesson will be enough to negotiate individual targets for the whole class.

Make sure the student is being appropriately ambitious but not unrealistic.

Try to guide the student to a grade at or above the FFT-E most likely estimate (but see the detailed guidance).

Record the agreed target in your mark book and in SIMS.

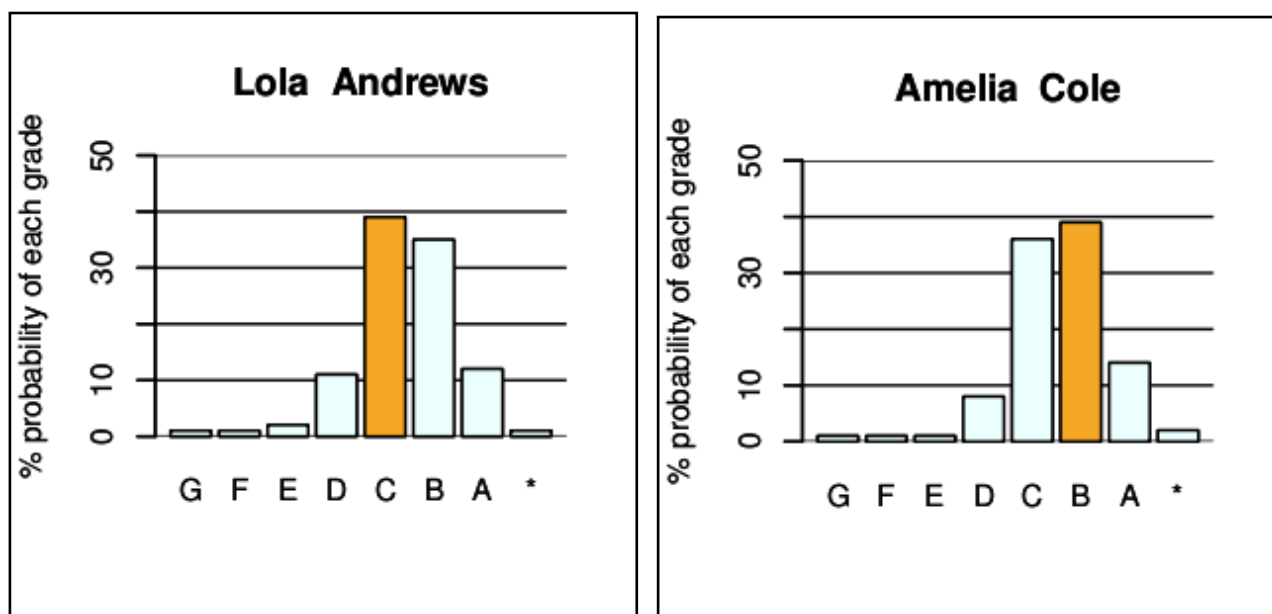
Make sure the student records it in their planner for your subject.

The timetable for 2014-15

Briefing for all teaching staff	Morning briefing, Wednesday 17 September , 8:30am
Year 10 assembly	Wednesday 17 September , extended to 9:15am
Subject tutors agree targets with students	Start Monday 29 September , finish by Friday 17 October
Targets entered onto SIMS	By Monday 20 October

Detailed Guidance

Take a close look at the chart. Is the most likely grade suitable? Is the next higher grade nearly the same probability or perhaps the next lower grade is nearly as likely?



In the case of Lola, she has nearly a 40% chance of a C (the most likely grade), but nearly a 50% chance of getting a B or higher (35% + 12% + 1% = 48%). It would not be silly to aim at a grade B if Lola was ambitious.

Amelia on the other hand, has a most likely grade of a B but a low estimate of exceeding it. It would not be aspirational to drop to the C, but it is probably over-ambitious to aim higher than a B. Everything depends on circumstances though. If Amelia has worked really hard in KS3 these estimates may be too low. Perhaps she is keen for an A grade in your subject. If so, it will do no harm to say "OK, that's really ambitious, and if you are prepared to put in the work, I'll agree it. Remember, it's not the target that will get you there, it's the work you put in."

General principles

For almost all students, the most likely grade or the one above it is ambitious. Try not to drop below the FFT-E most likely grade. If you do, have a good reason ready. Be positive & supportive – be very careful of your language. There are some scenarios which are a bit more difficult to deal with ...

Scenario 1 – wildly ambitious student

They want not one grade higher than their FFT-E most likely grade, but two or more. Option 1: agree it, knowing that your first assessment will show them to be way under target and then you can re-open the discussion leading to a more realistic target. Option 2: explain that the work you've seen already suggests they are way below that target – suggest that they accept something more realistic, but you are always willing to raise the target if they produce higher quality work.

Scenario 2 – anxious high achiever

They are estimated many high grades across their subjects but worry about whether they can achieve them – they lack confidence in their ability or their capacity to work hard enough. This is often about the A*/A boundary. Don't sweat it. Accept the lower grade, build up their confidence and renegotiate the target grade once they know they can actually do it.

Scenario 3 – not engaged with the process

This may be to do with the student thinking they are low-attaining. Perhaps they have been estimated D or below. Tell them you want them to do as well as they can to give them a successful future, and you think they can achieve at least a grade “X”. Tell them you'd like to put this down – is that OK? It is important they hear that their achievement matters to you (despite it not seeming to matter to them at the moment).

Scenario 4 – upset by the estimates not being very high

This may be a student whose KS2 results were modest but who has worked very hard to raise their achievement by the end of KS3. The estimates based on KS2 results thus under-estimate their real potential. They are typically a hard-worker and keen to do well. Alternatively, they may be a student with a very high KS2 English mark and a very low KS2 Maths mark – FFT just averages them out and estimates middle grades.

Emphasise the uncertainties in the estimates - “they are produced by a computer which only knows your KS2 results, your date of birth and your gender, it doesn't know how hard you work”. Encourage them to raise at least one grade above FFT-E. This is one of the possible exceptional cases in which you might consider a target two grades above the most likely estimate.