

Smoking out underachievement in GCSE history.

All of you will have, by now, completed your analysis of this year's GCSE results and will be trying earnestly to put any messages learned into immediate practice. The more data-savvy of you will no doubt have used the pupils tracker (Autumn Package) to see which pupils in which classes have achieved, or exceeded their target grade, and which have fallen short. Sometimes the messages are clear: middle ability boys under-achieved; more able girls did surprisingly well with one teacher but not with another. At other times, there is just no discernible pattern and you have to ask questions about individual pupils. All this is healthy, as long as we use data wisely and are aware of what it can, and cannot, do.

Here are just a few of the strengths and possible pitfalls.

Why use the data?

- It helps you to go beyond how well the subject did to how well individual students performed in history compared to their other subjects, bearing in mind that the national residual in 2005 was -0.81 , (remember to divide by 6 to convert to percentage of a grade).
- It helps answer questions about value-added. It may well be that a 10% increase in A*-C grades is achieved entirely because the students who started the course had much higher prior attainment than last year.
- Knowledge of pupils' prior attainment is a pre-requisite for effective target setting and the monitoring of pupil progress.
- It helps you to focus on areas where, over time, data reveals weaknesses in performance that must be down to the teaching. Why is it that a set of 22 students who started Y10 with a point score of 25 in one school can end up with whereas in another school, down the road, the highest grade any of the 17 equivalent prior attainment students scored was D ?
- It helps to set challenges for teachers as well as students. If, nationally, the profile of the group suggests that there should be 3 A*s, 6 As, 16 Bs and 2 Cs, would you be happy with less? It's all about realistic but high expectations
- It helps paint a picture of likely attainment, even if all predictions are not absolutely foolproof.
- It shows you where your good examination teaching is taking place. It may not always be where you'd most expect it! This allows you to pass on best practice.

Some good habits to get into

- See the use of data as something self-engaged professionals readily adopt, rather than as something that is just another externally required means of accountability.
- Use the Autumn package to look at performance across the ability range and across classes. Explore boy /girl value added too. Residuals are helpful but they do not say which pupils did well. They don't reveal as many patterns as they might, but they are still widely used to monitor teacher effectiveness.
- Use the *progress graphs* often called *chances graphs* with all students from Y10. Ask what percentage of pupils with an APS of X points ended up with a grade Y.
- Do this for all levels of prior attainment. "To analyse the effectiveness of a department, the school should plot the percentage of pupils achieving each of the grades against national distribution" *Releasing Potential, Raising Attainment: Managing data in Secondary schools* (DfES 0722/2002)
- Use Fischer Family Trust data, especially as these include a significant challenge factor.
- Developing your own targets which are even more challenging than the national ones.

Some pitfalls to avoid.

Whilst a useful tool, and one which only became widely used a decade ago, residual analysis has its limitations:

- A subject area might have a high positive residual but, if the overall performance of the school is deemed to "below that of similar schools", it may still have the potential to improve.
- The converse is true: a subject area may have a negative residual but, if the overall school performance is viewed as being "well above like schools", it may be performing relatively well compared with other departments locally and nationally.
- Residuals do not show variations between lower, middle and upper ability bands.
- Residual scores for small cohorts of pupils must be treated with caution.
- Thinking that setting the targets is all there is to it. Knowing how to raise the game by teaching in a slightly different, and more effective, way is the real skill, and that's where your teaching expertise takes over.