



Llywodraeth Cymru  
Welsh Government

School Standards Unit

## **The model for banding secondary schools**

*Paper for information for stakeholders*

December 2011 v1.0

## Banding is a central element of the Minister's new accountability model for compulsory education in Wales

- In February the Minister for Education and Skills set out the case for improvement and a clear set of actions, of which banding was one, to drive forward his improvement agenda.
- The Minister has stated categorically that banding is NOT about labelling schools, naming and shaming or creating a divisive league table.
- Banding is about grouping schools according to a range of factors to establish priorities for differentiated support and to identify those from whom the sector can learn.
- The most important element of the banding system will be the framework of support and challenge that will be developed over time to accompany each band.
- The bands will inform support, challenge and intervention in a more standardised and transparent way than at present.
- It will be for local authorities and consortia to agree the detail of how they will use banding to help target support and raise standards for all.

## Selecting the right balance of data is key to getting the banding right and to lower the risk of unintended consequences

### The secondary model uses four groups of data:

- level 2 threshold including English/Welsh and mathematics
- capped points score
- attendance
- E/W and mathematics average points scores.

### Within each data group, relative performance is measured to take account of a selection of:

- actual performance
- progress over time and,
- performance relative to context and cohort.

Banding uses the relative performance of schools across the data to group schools into one of 5 bands. Band 1 schools are those whose data show good overall performance and progress across the measures. Band 5 schools are those where performance and progress are weak relative to other schools.

The data groups and measures reflect the Minister's priorities for improvement:

- literacy
- numeracy
- reducing the impact of deprivation, and
- improving attendance

**The bands issued to schools in September were PROVISIONAL. They have been updated for the final bands issued in December 2011 to include 2011 examinations data and 2 additional data elements.**

## Understanding the terminology for banding will help support clear communication

|   |   |
|---|---|
| FSM   | Free school meals – the proportion of pupils of statutory school age entitled to free school meals as reported in the school PLASC returns averaged over 3 years.   |
| Residual  | There is a strong relationship between FSM and achievement; this is modelled each year to show the ‘expected’ performance at any given FSM level based on the statistical relationship. The residual is the difference between actual achievement and the average or ‘expected’ achievement. A positive residual indicates that achievement exceeds the model expectation, whereas a negative residual indicates that achievement is lower than the model expected level.                                       |
| Value added   | Value added is a way of measuring the progress made by learners between 2 points in their education. Contextual value added takes into account a number of factors specific to the pupil (gender, month of birth, deprivation etc). The analysis looks at what an individual would be expected to achieve given prior performance and their context and then compares it to the actual achievements. Banding uses a combination of value added measured between key stage 2 and 4 and between key stage 3 and 4 |
| Level 2 threshold including English/Welsh and mathematics | Level thresholds are a way of measuring the volume of learning achieved in external examinations. The level 2 threshold is a volume of learning equivalent to 5 GCSEs at grade C or above. To achieve the ‘level 2 inc E/W/M’ threshold the total volume of learning must include a grade C or above for English or Welsh first language and mathematics. The balance of the learning can be any equivalent qualification in any subject at level 2.  |
| Capped points score                                       | Qualifications have points values which differ according to grade achieved. Capped points score is the average points per 15 year old for all qualifications at all grades achieved up to the equivalent in volume of 8 GCSEs. Learners’ ‘best’ results are taken first.  |

## It is important that schools and stakeholders understand how the bands have been calculated

- Each element of the 4 data groups is ranked to give schools' relative position compared to all schools in Wales.
- Relative performance is 'scored' according to the quarter in which it falls; quarter 1 represents performance in the top 25% of schools in Wales and quarter 4 represents the lowest 25%.
- This is not the same as the FSM benchmarking used in the Core Data Sets.
- The elements with a group are equally weighted.
- The attendance group is weighted at 50%.

### Key

1 = Performance in the top 25% of schools in Wales

2 = Performance in the top 50% of schools in Wales

3 = Performance in the lower 50% of schools in Wales

4 = Performance in the lower 25% of schools in Wales

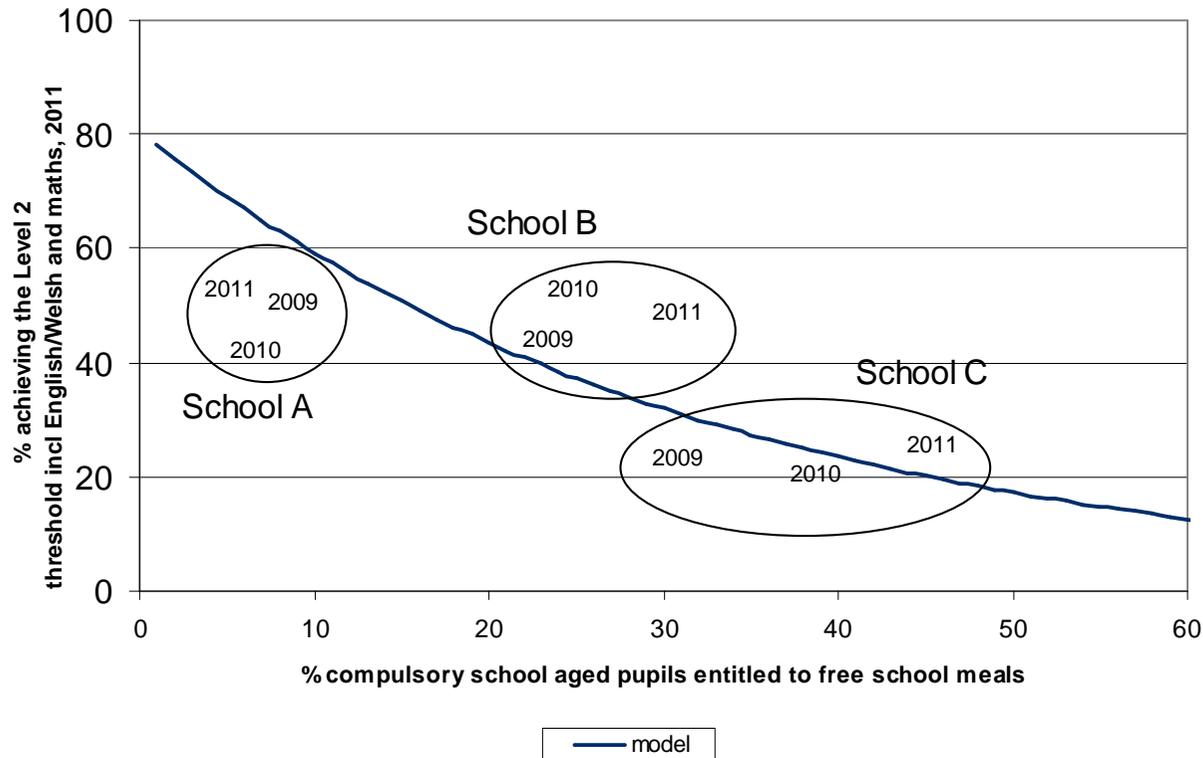
# Progress is measured relative to FSM levels in the school

School A's raw performance went down between 2009 and 2010 then improved again in 2011.

BUT their FSM rate fell so the higher raw result in 2011 is further below the expected level than in 2009.

This would give a relatively poor progress score.

School B's raw performance was higher than expected in each of the 3 years. Although the raw result remained almost the same in both 2010 and 2011 the FSM level increased so the 2009 result is much further above the line than the 2010 result. This would give a good positive progress score.



School C's raw performance is lower than the other example schools but their FSM is much higher. Both raw score and FSM have increased over the 3 years. They were performing below the modelled expectation but are now above it.

This would give a good positive progress score.

## Progress is measured relative to the overall performance of the school

- A school which makes progress on a high level of performance will get greater recognition in the progress measures than if it showed the same increase in performance but from a lower level of performance.
- For example, if the school improved from 40 to 45% it will get a higher score in a progress measure than if it increased from 30 to 35%.
- The reason for this is that the level of improvement is measured against the possible level of improvement. If the school improved from 40 to 45% then it improved 5 percentage points against a possible total improvement of 60 percentage points, which is therefore  $1/12^{\text{th}}$  or 8 % of what was possible in theory. However, if it had improved from 30 to 35% the improvement of 5 percentage points would only have been  $1/14^{\text{th}}$  or 7 % of the total possible improvement of 70 percentage points.
- It is important also to bear in mind that the progress measure is calculated on the basis of the improvement of its performance measured against its predicted performance based on its level of pupils entitled to free school meals (see previous slide).

## The level 2 threshold including English/Welsh and mathematics is the headline performance indicator for secondary schools in Wales

Within the data group there are 4 elements that look at performance against this measure in different ways:

- Raw score for most recent year.
- Most recent year result relative to FSM levels.
- 3 year progress measure looking at progress and performance set against FSM levels.
- Value added using an index incorporating both KS 2 to 4 and KS 3 to 4 value added for the most recent year based on the Welsh Government contextual model.
- Scores over the group are totalled to give a group score.

| <b>Level 2 threshold including English/Welsh and mathematics</b> |           |
|--|-----------|
| 2011 performance   | 4         |
| 2011 performance set against FSM                                 | 4         |
| Relative progress over 3 years                                   | 2         |
| Contextual value added   | 2         |
| <b>Group score</b>   | <b>12</b> |

## The capped points score reflects overall performance across all grades for the equivalent of learners' 'best 8' GCSEs

Within this data group there will eventually also be 4 elements. This measure was only introduced in 2010 so progress and value added could not be included in the provisional model, but is now included in the final model.

- Raw score for most recent year.
- Most recent year result relative to FSM levels.
- 2 year progress measure looking at progress and performance set against FSM levels - to be added for final banding.
- Value added using an index incorporating both KS 2 to 4 and KS 3 to 4 value added for the most recent year based on the Welsh Government contextual model - to be added for final banding.
- Scores over the group are totalled to give a group score.

|                                  |           |
|----------------------------------|-----------|
| <b>Capped points score</b>       |           |
| 2011 performance                 | 4         |
| 2011 performance set against FSM | 3         |
| Relative progress over 2 years   | 2         |
| Contextual value added           | 3         |
| <b>Group score</b>               | <b>12</b> |

## Banding has a focus on literacy and numeracy and seeks to move away from only looking at the threshold boundary (D/C borderline)

An average points score set against FSM-modelled expectation allows us to differentiate schools whose average points score is higher or lower than the average, given socio economic circumstances.

- Average points score per 15 year old for most recent year relative to FSM levels for English or Welsh first language. Where learners follow both, the higher of the two is included in the calculation
- Average points score per 15 year old for most recent year relative to FSM levels for mathematics.
- Scores over the group are totalled to give a group score.

| <b>English/Welsh and mathematics</b>           |          |
|--|----------|
| English/Welsh 2011 performance set against FSM | 4        |
| Mathematics 2011 performance set against FSM   | 2        |
| <b>Group score</b>                             | <b>6</b> |

## Poor attendance is a problem in Wales; learners need to be in school

Setting the absence rate for pupils of compulsory school age against FSM modelled expectation allows us to differentiate schools whose attendance is higher or lower than the average, given socio economic circumstances. All absences are included; no differentiation is made for authorised or non-authorised absence.

- Absence for most recent year relative to FSM levels.
- 3 year progress measure looking at progress and performance set against FSM levels.
- Scores over the group are totalled to give a group score.
- The contribution to total score for attendance is weighted at 50%.

| <b>Attendance</b>                |          |
|----------------------------------|----------|
| 2011 performance set against FSM | 1        |
| Relative progress over 3 years   | 1        |
| <b>Group score</b>               | <b>2</b> |

**Scores across the measures are totalled to give an overall score; the lower the score the better the relative performance**

In the provisional model the scores ranges are:

- Level 2 threshold range 4 to 16.
- Capped points score range 4 to 16.
- English/Welsh and mathematics range 2 to 8.
- Attendance is weighted at 50% so the range is 1 to 4.

| <b>The four group scores are totalled to give an overall score</b> |           |
|--|-----------|
| Level 2 threshold including English/Welsh and mathematics          | 12        |
| Capped points score  | 12        |
| English/Welsh and mathematics                                      | 6         |
| Attendance (50% weighting)   | 1         |
| <b>Total overall score</b>   | <b>31</b> |

## Band boundaries are based on the full range of possible scores

- A school in the top quarter for all measures across all groups would score 11.
- A school in the bottom quarter for all measures across all groups would score 44.
- Therefore the range is 33 which is divided by 5 to give the band boundaries:

| Band | Score range  |
|------|--------------|
| 1    | 11.0 to 17.6 |
| 2    | 17.6 to 24.2 |
| 3    | 24.2 to 30.8 |
| 4    | 30.8 to 37.4 |
| 5    | 37.4 to 44.0 |

***Note that the final banding has 2 additional measures so the score range and band boundaries have changed since the provisional banding.***

## What might a band 1 school look like?

### School Ysgol 1 is in Band 1

| Level 2 threshold including English/Welsh and mathematics |          |
|---|----------|
| 2011 performance  | 1        |
| 2011 performance set against FSM                          | 1        |
| Relative progress over 3 years                            | 2        |
| Contextual value added                                    | 2        |
| <b>Group score</b>  | <b>6</b> |

| Capped points score              |          |
|----------------------------------|----------|
| 2011 performance                 | 1        |
| 2011 performance set against FSM | 1        |
| Relative progress over 2 years   | 2        |
| Contextual value added           | 1        |
| <b>Group score</b>               | <b>5</b> |

| English/Welsh and mathematics                  |          |
|--|----------|
| English/Welsh 2011 performance set against FSM | 1        |
| Mathematics 2011 performance set against FSM   | 1        |
| <b>Group score</b>                             | <b>2</b> |

| Attendance                       |          |
|----------------------------------|----------|
| 2011 performance set against FSM | 2        |
| Relative progress over 3 years   | 2        |
| <b>Group score</b>               | <b>4</b> |

| The four group scores are totalled to give an overall score |           |
|---|-----------|
| Level 2 threshold including English/Welsh and mathematics   | 6         |
| Capped points score   | 5         |
| English/Welsh and mathematics                               | 2         |
| Attendance (50% weighting)                                  | 2         |
| <b>Total overall score</b>                                  | <b>15</b> |

A band 1 school will generally be doing well in relative terms and making progress. But, they may still have areas where they are less strong.

In the example the school's recent results for both level 2 including English/Welsh and mathematics and capped points score were in the top 25% of results across Wales, even when taking FSM levels into account. They are making progress and show good value added but their performances here are not quite as strong relative to other schools.

The average points for English/Welsh and mathematics taking FSM into account indicates strong performance relative to deprivation levels.

Attendance rates are in the top 50% of schools in Wales and progress is relatively good but there may be some room for improvement.

## What might a band 2 school look like?

### Ysgol Example 2 is in Band 2

| Level 2 threshold including English/Welsh and mathematics |          |
|---|----------|
| 2011 performance  | 4        |
| 2011 performance set against FSM                          | 1        |
| Relative progress over 3 years                            | 1        |
| Contextual value added                                    | 2        |
| <b>Group score</b>  | <b>8</b> |

| Capped points score              |           |
|----------------------------------|-----------|
| 2011 performance                 | 4         |
| 2011 performance set against FSM | 1         |
| Relative progress over 2 years   | 2         |
| Contextual value added           | 3         |
| <b>Group score</b>               | <b>10</b> |

| English/Welsh and mathematics                  |          |
|--|----------|
| English/Welsh 2011 performance set against FSM | 1        |
| Mathematics 2011 performance set against FSM   | 1        |
| <b>Group score</b>                             | <b>2</b> |

| Attendance                       |          |
|----------------------------------|----------|
| 2011 performance set against FSM | 2        |
| Relative progress over 3 years   | 1        |
| <b>Group score</b>               | <b>3</b> |

| The four group scores are totalled to give an overall score |             |
|---|-------------|
| Level 2 threshold including English/Welsh and mathematics   | 8           |
| Capped points score   | 10          |
| English/Welsh and mathematics                               | 2           |
| Attendance (50% weighting)                                  | 1.5         |
| <b>Total overall score</b>                                  | <b>21.5</b> |

A band 2 school will generally be doing well in relative terms and making progress. But, they will have a few more areas where they are less strong or need to improve than a band 1 school.

In the example the school's recent results for both level 2 including English/Welsh and mathematics and capped points score were in the bottom 25% of results across Wales. But taking FSM levels into account, their outcomes were in the top 25%. This type of pattern would be seen in schools with very high FSM where it might be unreasonable to expect very high 'raw' scores. They are making progress and show good value added relative to other schools.

The average points for English/Welsh and mathematics taking FSM into account indicates strong performance relative to deprivation levels.

Attendance rates are in the top 50% of schools in Wales and progress is good.

## What might a band 3 school look like?

Ysgol Example 3 is in Band 3

| Level 2 threshold including English/Welsh and mathematics |          |
|---|----------|
| 2011 performance  | 1        |
| 2011 performance set against FSM                          | 3        |
| Relative progress over 3 years                            | 2        |
| Contextual value added                                    | 2        |
| <b>Group score</b>  | <b>8</b> |

| Capped points score              |           |
|----------------------------------|-----------|
| 2011 performance                 | 2         |
| 2011 performance set against FSM | 3         |
| Relative progress over 2 years   | 3         |
| Contextual value added           | 2         |
| <b>Group score</b>               | <b>10</b> |

| English/Welsh and mathematics                  |          |
|--|----------|
| English/Welsh 2011 performance set against FSM | 4        |
| Mathematics 2011 performance set against FSM   | 2        |
| <b>Group score</b>                             | <b>6</b> |

| Attendance                       |          |
|----------------------------------|----------|
| 2011 performance set against FSM | 3        |
| Relative progress over 3 years   | 2        |
| <b>Group score</b>               | <b>5</b> |

| The four group scores are totalled to give an overall score |             |
|---|-------------|
| Level 2 threshold including English/Welsh and mathematics   | 8           |
| Capped points score   | 10          |
| English/Welsh and mathematics                               | 6           |
| Attendance (50% weighting)                                  | 2.5         |
| <b>Total overall score</b>                                  | <b>26.5</b> |

A band 3 school may have some areas of strength but will also have areas where they need to improve.

In the example the school's recent results for both level 2 including English/Welsh and mathematics and capped points score were relatively good. But taking FSM levels into account their outcomes were in the bottom 50%. This type of pattern might be seen in schools with low FSM where 'raw' scores are high but not as high as might be reasonable to expect given their context. They are making progress and show good value added relative to other schools though.

The average points for English/Welsh and mathematics taking FSM into account indicate that the school may want to look at the grades its learners achieve especially in English/Welsh to see if more learners could be getting even higher grades.

Attendance rates are in the bottom 50% of schools in Wales but the school is making progress in this area.

## What might a band 4 school look like?

Ysgol Example 4 is in Band 4

| Level 2 threshold including English/Welsh and mathematics |           |
|---|-----------|
| 2011 performance  | 3         |
| 2011 performance set against FSM                          | 3         |
| Relative progress over 3 years                            | 1         |
| Contextual value added                                    | 3         |
| <b>Group score</b>  | <b>10</b> |

| Capped points score              |           |
|----------------------------------|-----------|
| 2011 performance                 | 4         |
| 2011 performance set against FSM | 3         |
| Relative progress over 2 years   | 3         |
| Contextual value added           | 3         |
| <b>Group score</b>               | <b>13</b> |

| English/Welsh and mathematics                  |          |
|--|----------|
| English/Welsh 2011 performance set against FSM | 4        |
| Mathematics 2011 performance set against FSM   | 4        |
| <b>Group score</b>                             | <b>8</b> |

| Attendance                       |          |
|----------------------------------|----------|
| 2011 performance set against FSM | 4        |
| Relative progress over 3 years   | 2        |
| <b>Group score</b>               | <b>6</b> |

| The four group scores are totalled to give an overall score |           |
|---|-----------|
| Level 2 threshold including English/Welsh and mathematics   | 10        |
| Capped points score   | 13        |
| English/Welsh and mathematics                               | 8         |
| Attendance (50% weighting)                                  | 3         |
| <b>Total overall score</b>                                  | <b>34</b> |

A band 4 school will have more areas of relative weakness but may still have some areas of strength to build on.

In the example the school's recent results for level 2 including English/Welsh and mathematics were in the bottom 50% and for capped points score were in the bottom 25% of schools in Wales. Taking FSM levels into account their outcomes were still in the bottom 50%. But the school is making good progress taking its context into account.

The average points for English/Welsh and mathematics taking FSM into account indicate that the school may want to look at the grades its learners achieve to see if more learners could be getting even higher grades.

Attendance rates are in the bottom 25% of schools in Wales but the school is making some progress in this area.

## What might a band 5 school look like?

### Ysgol Example 5 is in Band 5

| Level 2 threshold including English/Welsh and mathematics |           |
|---|-----------|
| 2011 performance  | 4         |
| 2011 performance set against FSM                          | 4         |
| Relative progress over 3 years                            | 3         |
| Contextual value added                                    | 4         |
| <b>Group score</b>  | <b>15</b> |

| Capped points score              |           |
|----------------------------------|-----------|
| 2011 performance                 | 3         |
| 2011 performance set against FSM | 4         |
| Relative progress over 2 years   | 4         |
| Contextual value added           | 3         |
| <b>Group score</b>               | <b>14</b> |

| English/Welsh and mathematics                  |          |
|--|----------|
| English/Welsh 2011 performance set against FSM | 4        |
| Mathematics 2011 performance set against FSM   | 4        |
| <b>Group score</b>                             | <b>8</b> |

| Attendance                       |          |
|----------------------------------|----------|
| 2011 performance set against FSM | 4        |
| Relative progress over 3 years   | 2        |
| <b>Group score</b>               | <b>6</b> |

| The four group scores are totalled to give an overall score |           |
|---|-----------|
| Level 2 threshold including English/Welsh and mathematics   | 15        |
| Capped points score   | 14        |
| English/Welsh and mathematics                               | 8         |
| Attendance (50% weighting)                                  | 3         |
| <b>Total overall score</b>                                  | <b>40</b> |

A band 5 school's relative performance will show many areas for improvement but they may still have some areas of strength to build on.

In the example the school's recent results for level 2 including English/Welsh and mathematics were in the bottom 25% even when taking FSM levels into account. Progress is in the bottom 50% and value added in the bottom 25%. Capped points score performance is also in the bottom 25% of schools in Wales taking FSM levels into account.

The average points for English/Welsh and mathematics taking FSM into account indicate that the school may want to look at the grades its learners achieve to see if more learners could be getting even higher grades.

Attendance rates are in the bottom 25% of schools in Wales but the school is making some progress in this area.

## In Summary...

- There will be variation between schools within any band and the pattern of relative performance will differ between schools in any band.
- Banding is only one small part of the picture – schools will use their Core Data Sets and pupil level data to identify the underlying issues, to target resource and attention and to monitor progress.
- ALL schools have room for improvement.
- High performing schools and departments should seek to share their good practice to ensure that ALL schools improve and ALL learners get the best possible opportunities.
- Banding is NOT a league table – it is NOT about ranking, naming and shaming.
- Banding IS about being transparent about the relative performance of our schools – it IS about putting our efforts and resource to where they are most urgently needed and promoting improvement for all.
- September banding used 2010 data and was provisional.
- Final banding now includes 2011 examinations data and two additional data elements for capped points score.
- Queries to [SSU@wales.gsi.gov.uk](mailto:SSU@wales.gsi.gov.uk).