



Department
for Education

Glossary of terms

Integrated Curriculum and Financial Planning

**Written for the Department for Education
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Glossary of technical terms

Average Class Size (ACS)

This is the traditional name for the pupil:teacher ratio as applied to the curriculum. It is the size of a teaching group if all pupils are evenly divided between all the teachers teaching on school timetable.

It is worth noting that in post-16, pupils may have some non-contact time and this will be reflected in the average class size. This will need to be taken into account when using ICFP for post-16 settings.

The value calculated for the whole school takes account of all teacher periods, including those in intervention/learning support activity not allocated to specific year groups. This statistic is comparable between schools with different timetable cycles. It is also applicable to the whole of the 5 to 18 age range with the caution that the average class size is distinct from the average size of a teaching group in some circumstances as indicated above.

Some schools use a *deployment analysis* with columns that give an average class size for the teacher periods allocated to an individual year group.

Average staff cost

This is the total cost of employing the staff (including on-costs) divided by the FTE value of those staff. For benchmarking purposes it is important to clarify what counts as an FTE value especially with Educational Support staff many of whom only work during term time. For internal school purposes only it is quite possible to use a headcount, a term time figure for the FTE or even hours per week. Whilst this can distort the average staff cost when compared with external values it can simplify initial calculations aimed at providing a good enough answer rather than one that is absolutely accurate.

With teachers it is important to include all staff employed on teaching contracts in the FTE even if they do not actually do any teaching, for example, the headteacher or SENCO. Some schools include agency staff or staff employed centrally by the MAT in the school's FTE value, others do not. Similarly where supply or agency staff are used to cover long term vacancies it is important to consider the substantive position they are filling and take a view as to whether to include these staff or not.

For benchmarking purposes care must be taken to compare like with like as far as possible. It is important to note that national benchmarking data for teacher cost may not include any on-costs.

Average teacher load

All teachers who teach working under School Teachers' Pay and Conditions (STPCD) should have a proportion of the timetable cycle set aside as non-contact time for planning, preparation and assessment. This is called PPA time. Teachers with management responsibility are entitled to a further element of non-contact time as far as is reasonably practicable for the purpose of discharging their management responsibility during the school day. Newly qualified teachers are entitled to a reduced teaching load. All the relevant rules concerning these matters are available on the GOV.UK website.

Schools sometimes allocate other elements of non-contact time to teachers, for example for liaison with partner schools. The overall effect is that there are a whole range of maximum teaching loads across the teaching staff in any one school. Depending upon how well the timetable can be made to fit, teachers may be teaching at their theoretical upper limit or above or below it (provided that their PPA time is preserved).

The average teacher load is the total number of teacher periods the teachers provide divided by the FTE value. For example if there are 50 FTE teachers and in total they supply 1000 teacher periods the average teaching load is 20 teaching periods.

There are two possible average load values in a school; the actual value in the current timetable and the theoretical value if all teachers taught at their theoretical upper limit. In some schools there will be no difference between these two values. It is more common in secondary schools to find some difference between these values due to the mismatch between specialist teaching need and specialist teaching requirement. The mismatch is sometimes reduced to zero by using teaching staff whose timetables are slightly under target contact in areas such as Learning Support. Some people refer to the difference between actual load and theoretical load as 'curriculum headroom'.

Care should be exercised in assuming that it is always possible to get a perfect fit in a school timetable. In many cases this could only be achieved by using teachers in specialist areas where they have little or no adequate expertise, hence jeopardising the education of pupils. In a MAT it is a matter of internal policy whether the Average Teacher Load is consistent across the MAT.

Basic

'Basic' is a measure of teacher time used as a zero reference point in some types of curriculum analysis for 11 to 16 schools. The original work on this subject was by T I Davies in School Organisation (Pergamon Press). It has been adapted and modified by some authors and users since then. The level of teacher time used as a zero reference was originally the pupil roll number divided by three for a school using a nine period timetable cycle. This is equivalent to using the teacher time required to give an average class size of 27.

The term 'basic' has no value meaning and does not and has never implied a level to which any school should aspire. This is perhaps the origin of the common assumption that schools should aim for class sizes of 27, which forms the basis of some approaches. Analysis shows that it is not universally applicable across all sizes of school, though it can work well in schools larger than 700 pupils with year groups that are very close to a multiple of 30 pupils. It is not applicable to post-16 as 27 is not an achievable average class size.

Some primary schools have redefined this by predefining a 'basic' curriculum and using that as a reference level, with additional resources (e.g. HLTA time) allocated above or below this level.

Bonus

'Bonus', along with 'basic', is part of the approach to curriculum analysis proposed by T I Davies. In any 11-to-16 school there is an actual amount of teacher time allocated to the 11-to-16 curriculum. This teacher time is usually measured in teacher periods. To convert the 'actual' value which will usually be a three figure value to a small one or two digit value the difference between 'actual' and 'basic' can be used. This difference is called 'bonus'. The majority of school curricula will use an actual number of teacher periods higher than the number needed for the 'basic' level of an average class size of 27. The 'bonus' figure will be positive in this case and the average class size will be lower than 27. In the case of an individual year group such as a year 7 year group taught all week in classes of 30 the 'bonus' figure will be negative. The difference in teacher periods that makes the average class size greater than 27 in year 7 is usually transferred to another year group such as year 10 to provide a class size below 27 with greater curriculum breadth. Bonus, like basic, has no value meaning. It is simply a difference in teacher time and carries no implication of benefit.

In a school where teacher periods are allocated to whole school activity such as Learning Support, Intervention or one to one tuition these periods add to the overall contact periods and hence the overall value of class size. The only way to include them in the bonus/basic model is to consider them allocated to various year groups in the year 7 to 11 range.

Relative bonus (sometimes referred to as 'percentage bonus')

This is the 'bonus' as a percentage of the 'basic' in an 11-to-16 curriculum. It is independent of the number of periods in the timetable cycle and hence can be used in a similar manner to Average Class Size to make comparisons between other schools or from year to year in the same school. Average Class Size has the advantage of being applicable to all school years, while 'bonus' can only be used in the context of years 7 to 11.

Some schools use relative bonus alongside a value for teacher contact ratio to give the overall cost envelope for what they have decided is a suitable curriculum and teacher workload in terms of a number of FTE teachers.

For example, if a school decides to work to a relative bonus of 8% this means that for key stages 3 and 4 taken together the average class size is going to be 25¹. Schools could instead use the average class size as a simpler measure. From the average class size the teacher period allocation follows with a simple calculation² and then the curriculum can be planned by distributing those teacher periods as required. Exactly the same process can be achieved using a 'basic' reference line and a distribution of 'bonus' periods but in a more abstract form.

Contact ratio

This is the proportion of the timetable cycle teachers spend in teaching contact taken as an average across all teaching staff. It is the Average Load divided by the period length of the timetable cycle and is usually expressed as a decimal, e.g. 0.72. This number is comparable between schools with different timetable cycles or in the same school between years where the timetable cycle changes as it is independent of the number of periods in the timetable cycle. This takes into account the 10% preparation, planning and assessment time to which all teachers are entitled, any management time allocated to leaders as well as the reduced contact time allocated to trainee teachers.

Contact time

The time during the timetable cycle teachers spend in planned teaching contact.

Curriculum structure

The detail of classes, bands, option blocks etc. that make up the organisation of different groups of pupils in the timetable

Deployment analysis (also called Staff deployment analysis)

This is a list of all the areas of the curriculum where teacher contact time is allocated or is to be allocated with detail of pupil roll numbers and the teacher time allocated, e.g. subject areas or year groups. The Average Class Size is a statistic that can be used to summarise the result and to make comparison with other schools with different timetable cycles. It is possible to extend this analysis to cover all staff who work in the classroom including staff such as HLTAs or TAs who operate in a pupil support role.

¹ *Average Class Size* = $\frac{2700}{(100 + \text{relative bonus})}$

² *tp allocation* = $\frac{\text{Pupil roll} \times \text{cycle length}}{\text{Average class size}}$

FTE

Full time equivalent. For example a school with one full time teacher and one part time teacher who is paid for three days out of the five in a week has an FTE total of 1.6. The reciprocal of the contact ratio gives the FTE value needed to put one additional teacher on the timetable for every period of the cycle. This can be a useful 'rule of thumb' calculation when discussing changes in curriculum structure. Note that this is not the same as the headcount which does take account of the part time nature of some employment contracts.

Key Performance Indicator (KPI)

A metric that can be used to indicate some important aspect of school performance or efficiency or manner of operation.

Management Time

Non-contact time allocated to teachers with management responsibility for the purposes of discharging aspects of that responsibility during the school day. See School Teachers' Pay and Conditions of Service Document (STPCD) for a full definition.

Non-contact time

Time in the timetable cycle allocated to teacher timetables for purposes other than teaching.

Planned budget

The budget a school has decided to work to.

PPA time

Time allocated to teachers with a teaching load for the purposes of Planning, Preparation and Assessment. For details entitlement and minimum levels see STPCD.

Pupil to teacher ratio (PTR)

The ratio of pupils to FTE teachers in the school.

Teacher Loadings

A list, usually in a spreadsheet, for every teacher showing their FTE (e.g. 0.8 for staff working 4 days per week), number of periods in the timetable cycle for which they are employed, maximum number of teaching periods (or in some cases just their current timetable allocation of teaching periods), PPA, management and any other non-contact period allocations. In planning a timetable a teacher loading chart is essential and in a secondary school it has to include columns showing how each teacher's contact time is allocated to different specialist subjects. The sum of those columns must link with the

curriculum demand for specialist teaching. This is the first feasibility test for a secondary school timetable because there is no possible timetable unless the available teacher periods for every specialist area equal or exceed the curriculum demand.

In a primary school it is still worth drawing up a teacher loading chart even for a small number of staff if only to make the allocation of management time clear. In the primary situation, education support staff can be added to this chart as required.

Teacher Period

The teacher time measured in a school timetable. One teacher for one period in the cycle counts as one teacher period. The most common timetable software in secondary schools, NOVA-T6, uses class periods. The totals of class periods and teacher periods can be different depending upon how the software is used.

Teacher time

This is normally measured in teacher periods but it could be measured in teacher hours and minutes if required. In a primary school the week must be divided into notional periods which are probably not demarcated by bells to indicate a change of lesson. Most primary schools can be analysed using a 10 period cycle so one teacher for one half day is in effect one teacher period.

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