

# COLLEGE COLLABORATION FUND – DESIGNING SECTOR LEADING REPORTS

## AVERAGE CLASS SIZE

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### Purpose

The purpose of this guide is to provide an exemplar for FE providers to monitor their average class sizes. This is a critical factor in determining the efficiency of curriculum delivery and may be used by management teams as a lever to reduce cost in-year, or to inform planning.

### Background

A small group of colleges have collaborated to produce this short guide for FE providers, which recommends reporting approach, data preparation and design considerations, as an exemplar for the sector. Government sources provide little guidance on the optimal class sizes for colleges, but averages are occasionally quoted in research papers. These show a very broad range, depending on college and provision type, from around eight to the mid-twenties. Colleges typically have an overall average class size in mind but tend to adopt a more refined approach for detailed planning. Within the same college for example, it is not unusual to plan for Foundation Learning class sizes of ten or less and Level 3 classes of twenty-four or more. For reporting purposes, it is normal for colleges to review average class sizes by broad area of provision, by organisational unit, and by Level. In most circumstances it would be expected that the average class size will diminish as the academic year progresses. College managers should give careful consideration to their purpose for reviewing average class sizes at different points in the year. An early snapshot may provide opportunities to collapse groups to improve efficiency, whereas the purpose of reporting later in the year may be limited merely to informing the following year's curriculum plan.

### Definitions used in this guide

#### Average Class Size

Within the referenced documents, the median is occasionally mentioned but for this guide, the average class size will be taken as the mean. There is usually little value in expressing this average to more than one decimal place.

#### Enrolled students, Starters and Current Students

Enrolled students are all students (excluding enrolment errors) that were active enrolments on a relevant course at any point in the academic year, between the start and end dates of that course. Starters are students who completed the funding qualifying period and will therefore count for funding and performance measurement purposes. Current students are those active when the report was run.

#### Cohorts, Courses, Groups and Classes

Some of these terms are used interchangeably in reports and articles, so this guide will use the following definitions: a cohort is a group of concurrent students that have something in common. It would generally be expected that these are the largest groupings with potentially very broad criteria for inclusion, such as all those studying a particular learning aim, all those of a particular age or all those in a particular location. A course is an object within the student records system with a unique (in-year) course code, onto which students can enrol. A course could have any number of enrolments and may comprise many groups, each being a sub-division into which students are exclusively enrolled. Each group is likely to have its own timetable, but several groups could be timetabled together to form classes. A class is a meeting, usually scheduled weekly, involving students and a teacher. In most cases, the class will consist of just one group and possibly of just one course. The composition of classes may however be more complex, with several groups being brought together through the timetable. Our measure of average class size concerns these timetabled meetings and the mean ratio of students to teachers within them.

#### Broad areas of provision and organisational units

In General Further Education colleges, it is customary for reporting purposes, to delineate broad areas of provision that are usually defined by funding stream or mode of attendance. For example, 16-19 Full time, Funded part time, Higher Education, Full cost, Apprenticeships and School Links are typical categories. Organisational units in this case are referring to colleges within a group, departments within a college, or programme areas within a department.

# Calculation Method

## The Relevance of Timing

The first issue is to decide which students are to be included. In the opening days and weeks of an academic year the only number available is the enrolled students. Monitoring at this point is important as very small classes can be removed with minimal impact. There is also a danger of over-sized classes (particularly in specialist workshops and ICT rooms) contributing to early drop-out. In most cases that follow the standard delivery model, reports should use “starters” from mid-October, as the key variable in average class size calculations. Class-sizes based on current students are always relevant, but reports should clearly indicate which student number has been used. For most types of provision, the opportunities to respond to inefficient class sizes diminish as the year progresses. English and maths provision for full time 16-19s is an example where collapsing small classes may remain an option throughout most of the year. This assumes however that there are many classes to start with and they are all following a common scheme of work.

## Groups or Registers?

Colleges with relatively simple and straightforward delivery arrangements may find, at the highest level, that simply dividing the number of students by the number of groups, gives a sufficiently accurate measure. For more complex providers and for drilling into detail however, registers are the best way to determine the number of students in a class. This can be relatively easy or difficult, depending on the quality of the timetabling. When done correctly, there will be one register for a class, regardless of how many groups have been timetabled together. Reports of average class size should check for poor timetabling by grouping together registers assigned to the same teacher, at the same time. Many teachers will have experienced having to take two or more registers in the same session, to account for all the students in the class. This is a common timetabling error that can arise when groups are infilling with each other. Errors of this nature should be anticipated and nullified in the reporting of average class size, teaching space utilisation and staff utilisation.

## Report Exemplar

We are not proposing any specific format for an Average Class Size report but offer this as a suggestion. The table below could be for a college group, an individual college, or any organisational unit within a college. One would expect the organisational level of the report to be among the parameters that can be selected prior to running the report.

	Students	Classes	Average Class Size
<b>Higher Education</b>	<b>145</b>	<b>7</b>	<b>20.7</b>
<b>Further Education</b>	<b>2336</b>	<b>120</b>	<b>19.5</b>
<b>Funded Part-time</b>	<b>567</b>	<b>32</b>	<b>17.7</b>
Up to level 1	44	5	8.8
Level 2	258	14	18.4
Level 3	265	13	20.4
<b>16-19 Full-time</b>	<b>1769</b>	<b>88</b>	<b>20.1</b>
Up to level 1	125	12	10.4
Level 2	462	22	21.0
Level 3	564	26	21.7
A Levels*	618	28	22.1
* A Level student-subjects			
<b>Full-time English &amp; Maths</b>	<b>965</b>	<b>66</b>	<b>14.6</b>
English GCSE	256	17	15.1
English FS	158	12	13.2
Masths GCSE	329	21	15.7
Maths FS	222	16	13.9
<b>Full Cost</b>	<b>213</b>	<b>13</b>	<b>16.4</b>

Here we see three broad areas of provision represented. Higher Education and Full Cost are each presented in a single line as there is little under-lying detail to worry about.

Further Education however has been split first by mode of attendance and then qualification level. The data for A Levels are separated from the rest of the Level 3 courses. The relationships between the elements are shown through indenting and the use of colour. The Further Education totals for students and classes are the sum of the full and part time elements. Each element's totals are summed from the details for each qualification level.

The inclusion and treatment of A Levels adds a complication; there aren't 618 A Level students. There are in fact 206, each studying 3 A Levels and there are 28 A Level subject groups. This means the total number of classes is correct, but the student numbers shown for 16-19 Full time and for Further Education as a whole, are both inflated by 406. In a case involving A Levels like this, it may therefore be prudent to use the label “Enrolments” rather than “Students”. Where the leadership has set targets or upper or lower limits for average class size, colour coding (RAG) could be used in the third column to draw attention to the worst or best performing categories. In this example, the levels of Functional Skills are not shown for English and maths. This is because it is assumed that all levels of functional skill are delivered together in the same classes, so the timetables and registers cannot delineate between them. Where the delivery is separated by qualification level, it will be possible to show average class sizes for each.