Fife Secondary School Capacity Model

Background

1.0 The Scottish Executive published circular 3/2004, 'Guidance on Determining School Capacities', in December 2004. Rather than provide a set of rules, the guidance highlighted relevant legislation and specific areas of interest, and recommended an open, transparent, fair and rigorous approach to the calculation of school capacities which is applied consistently across the authority. Although there is updated guidance for primary methodology, published by the Scottish Government in October 2014, further updates have not been published for secondary. The guidance states that it is the responsibility of each local authority to determine the capacity of individual schools and the area per pupil applied.

Capacity Model

2.0 Accommodation Schedules

2.1 The capacity of each secondary school is based on a schedule of accommodation, updated and reviewed regularly by secondary school Business Managers.

3.0 Class Size Restrictions

3.1 Current guidance on maximum class sizes (i.e. number of pupils per class) in the secondary sector is as follows:

- Secondary 1 and 2 - maximum of 33 set by teachers' terms and conditions
- Secondary 3 - 6 - maximum of 30 set by teachers' terms and conditions
- Practical subjects - maximum of 20 set by teachers' terms and conditions.

3.2 Non-practical subjects include English, Mathematics, Geography, Modern Studies, History and Languages. S econdary schools may have non-practical rooms which can accommodate 33 pupils, however for the purposes of the modelling, all non-practical classes are calculated with a maximum capacity of 30 pupils. Pupils in S1 and S2 may be accommodated in classes of 33 where the physical size of the class can accommodate 33 pupils.

3.3 Practical subjects include **Admin and IT, Art, Sciences, Design Technology, Practical Craft and Metalwork and Health and Food Technology.** These classes are restricted to a maximum of 20 pupils per class.

3.4 The maximum number of pupils that can be accommodated in each teaching area, depending on the size of the classroom, is calculated using **Appendix A**. This provides the area: pupil ratio per subject (i.e. square metre per pupil).

3.5 There are a number of schools which have unique learning spaces which are not replicable across all our schools. To ensure the modelling for capacity calculation is consistent, the following areas are examples not included in the capacity figures; Assembly Halls, Outdoor PE spaces, Tutorial Spaces, Enhanced Support provision, Support for Learning spaces, Libraries, Staff Workspaces, Meeting Rooms etc.

4.0 Capacity calculation methodology

4.1 When calculating the capacity of a secondary school, reference is made to the following types of capacity:

(a) *maximum capacity*

The maximum capacity is the number of pupils that can be accommodated in each teaching area, based on room size and regardless of class type, if all pupil places in the school were utilised.

(b) *functional capacity*

The functional capacity is based on the maximum capacity and incorporates class size restrictions dependent on whether the class is practical or non-practical and S1-S2 or S3-S6 (as per paragraph 3.1).

(c) *planning capacity*

The planning capacity is based on the functional capacity and incorporates an additional flexibility to allow for timetabling limitations (10%) and curriculum choices (20%). These are values which have also been used by other local authorities when calculating secondary school capacities.

4.2 The calculator shown within Appendix B ensures sufficient capacity is available each year for the potential maximum S1 intake, year on year, depending on staying on rate for S5 and S6.

5.0 Summary

5.1 The capacity of a secondary school is based on accommodation available, pupil ratio per area, class size restrictions, timetable restrictions and curriculum flexibility.

5.2 The size and type of rooms within a school will restrict the number of pupils that can be accommodated.

5.3 Updated planning capacities are submitted to the Scottish Government annually as part of the School Estate Core Facts return. These figures are also included in future school roll projection modelling and the continued school estate review.

Appendix A – Maximum number of pupils per teaching area depending on class type
Appendix B – Example Accommodation Schedule showing the breakdown of practical and non-practical spaces
Appendix C – Capacity calculator, showing maximum S1 intake

Number of pupils per teaching area, depending on class type

A guide to the number of pupils that can be accommodated in each learning space, depending on the class type, is shown in the table below. The SNCT Handbook, Appendix 2.9 states which curricular areas are defined as practical subjects.

Type of classrooms	Range of area per pupil (sqm pp)	Practical /non-practical teaching areas
Non-practical classrooms	>1.4 **sqm pp**	Non-practical
Drama	>2 **sqm pp**	Non-practical
Music	>2 **sqm pp**	Non-practical
PE – Games Hall, Dance, gymnasium and fitness	>2 **sqm pp**	Non-practical
Business / Computing	>1.8 **sqm pp**	Non-practical
Admin and IT	>1.8 **sqm pp**	Practical
Art areas	>2.5 **sqm pp**	Practical
Sciences	>2.5 **sqm pp**	Practical
Technical areas (DET, CDT, Graph Comms etc)	>3 **sqm pp**	Practical
Technical craft areas – Wood / Metal work	>4 **sqm pp**	Practical
Home Economics	>3 **sqm pp**	Practical

Learning space size in practical subjects is determined by the size of space required to incorporate the equipment necessary to deliver the specific curricular area. This is the same for non-practical subjects such as music, that also require a variety of equipment.

Accommodation Schedule (showing breakdown of practical and non-practical subjects)

The practical and non-practical classes are calculated based on the overall space in each classroom.

Example Capacity Summary Spreadsheet					
	No. of Classrooms	**Pupils per Class**			
Non-practical e.g.					
English		30	Non-practical		
Maths		30	Non-practical		
Languages		30	Non-practical		
Social (geography etc.)		30	Non-practical		
RE/PSE		30	Non-practical		
Gym		30	Non-practical		
Sports Hall		30	Non-practical		
Fitness		30	Non-practical		
Drama		30	Non-practical		
Music		30	Non-practical		
		30	Non-practical		
				Number of non-practical areas	
Practical e.g.					
Science		20	Practical		
Tech/CDT/Graph Comm		20	Practical		
HE		20	Practical		
Admin / IT		20	Practical		
Art		20	Practical		
				Number of practical areas	

Capacity Calculator

The theoretical maximum S1 intake is calculated by dividing the S1 intake factor by the planning capacity. This theoretical maximum is then divided by class size sets of either 20 pupils or 33 pupils to calculate the optimum S1 intake at each school. When the planning capacity is available this also allows the optimum S1 intake to be calculated by incorporating the staying-on rate beyond S4.

Accommodation type	Room type	Number of areas
Permanent	Practical	0
	Non-Practical	0
Temporary	Practical	0
	Non-Practical	0
	Total	

Calculation of capacity in ...	Number of teaching areas	Maximum Pupils	Functional Capacity
All practical areas	0	20	
Non-practical areas for S1/S2 Maths & English		33	
Non-practical areas for remaining S1/S2		33	
Non-practical areas for S3/S6 pupils		30	
Total			
Adjustments for timetabling issues	90%		
Adjustments for curriculum choices	80%		
Maximum calculated capacity at school			
Planning Capacity at school			

To calculate maximum S1 intake	
S1-S4 pupil rate (4 years x 100%)	
S4-S5 staying-on rate (%)	%
S4-S6 staying-on rate (%)	%
S1 intake factor	
Maximum S1 intake	

	Class Size	Class Number	S1 intake
Optimum S1 intake	33		
	20		