

The apprenticeship of pupil teachers, therefore, is merely an improved method of meeting what is, under any circumstances, a necessity of the case; and where such assistants are maintained at the public expense, it becomes of increased importance to furnish them with all the mechanical appliances that have been found by experience to be the best calculated to give effect to their services.

The main end to be attained is the concentration of the attention of the teacher upon his own separate class, and of the class upon its teacher, to the exclusion of distracting sounds and objects, and without obstruction to the head master's power of superintending the whole of the classes and their teachers. This concentration would be effected most completely if each teacher held his class in a separate room; but such an arrangement would be inconsistent with a proper superintendence, and would be open to other objections. The common school-room should, therefore, be planned and fitted to realise, as nearly as may be, the combined advantages of isolation and of superintendence, without destroying its use for such purposes as may require a large apartment. *The best shape is an oblong.* Groups of benches and desks should be arranged along one of the walls. Each group should be divided from the adjacent group or groups by an alley in which a light curtain can be drawn forward or back. Each class, when seated in a group of desks, can thus be isolated on its sides from the rest of the school, its teachers standing in front of it, where the vacant floor allows him to place his easel for the suspension of diagrams and the use of the black board, or to draw out the children occasionally from their desks and to instruct them standing, for the sake of relief by change of position. The seats at the desks and the vacant floor in front of each group are both needed, and should therefore be allowed for in calculating the space requisite for each class.

The Committee of Council do not recommend that the benches and desks should be immovably fixed to the floor in any schools. They ought to be so constructed as to admit of being readily removed when necessary, but not so as to be easily pushed out of place by accident, or to be shaken by the movements of the children when seated at them.

By drawing back the curtain between two groups of desks, the principal teacher can combine two classes into one for the purpose of a gallery lesson; or a gallery (doubling the depth of benches, and omitting desks), may be substituted for one of the groups. For simultaneous instruction, such a gallery is better than the combination of two groups by the withdrawal of the intermediate curtain; because the combined length of the two groups (if more than fifteen feet) is greater than will allow the teacher to command at a glance all the children sitting in the same line. It is advisable, therefore, always to provide a gallery; but this is best placed in a class-room.

The master of a school should never be allowed to organise it so as to provide for carrying out the entire business of instruction without his own direct intervention in giving the lessons. He ought, as a rule, to have one or more of the classes (to be varied from time to time) in a group, or in the gallery under his own immediate charge. He must indeed at times leave himself at liberty to observe the manner in which his assistants or apprentices teach, and serve the collective working of his school. But his duties will be very ill-performed if (what is called) general superintendence forms the sum, or principal part of them.

The reasons of the following rules will be readily inferred from these preliminary explanations, and the annexed plans have been prepared to illustrate the rules of the board as regards the arrangement of the buildings and the internal fittings of schools and class-rooms.

3. RULES IN PLANNING A SCHOOL.

(a) In planning a school-room, it must be borne in mind that the capacity of the room, and the number of children it can accommodate, depends not merely on its area, but on its area, its shape, and the positions of the doors and fireplaces.

(b) The best width for a school-room intended to accommodate any number of children between 48 and 144 is from 16 to 20 feet. This gives sufficient space for each group of benches and desks to be ranged three rows deep along one wall, for the teachers to stand at a proper distance from their classes, and for the classes to be drawn out, when necessary, in front of the desks, around the master or pupil teachers. (No additional accommodation being gained by greater width in the room, the cost of such an increase in the dimensions is thrown away.)

(c) A school not receiving infants should generally be divided into at least four classes. (The varying capacities of children between seven and thirteen years old will be found to require at least thus much subdivision.)

(d) Benches and desks, graduated according to the ages of the children, should be provided for all the scholars in actual attendance and therefore a school-room should contain at least four groups.

(e.) An allowance of 18 inches on each desk and bench will suffice for the junior classes, but not less than 22 inches for the senior classes; otherwise they may be cramped in writing.

The length therefore of each group should be some multiple of 18 or 22 inches respectively.

Thus, at 18 inches per child,

A group 6 ft. 0 in. long will accommodate	4	} Children in a row.
" 7 6 "	5	
" 9 0 "	6	
" 10 6 "	7	
" 12 0 "	8	

At 22 inches per child,

A group 7 ft. 4 in. long will accommodate	4
" 9 2 "	5
" 11 0 "	6

In the annexed plans 18 inches have been taken as the allowance per child. The withdrawal of a child from each row of this dimension will practically answer the purposes of the other dimensions.

(f.) The desks should be either quite flat or *very slightly* inclined. The objections to the inclined desk are, that pencils, pens, &c., are constantly slipping from it, and that it cannot be conveniently used as a table. The objection to the flat desk is, that it has a tendency to make the children stoop. A raised ledge in front of a desk interferes with the arm in writing.

(g.) As a general rule no benches and desks should be more than 12 feet long; and no group should contain more than three rows of benches and desks (because in proportion as the depth is increased, the teacher must raise his voice to a higher pitch; and this becomes exhausting to himself, while at the same time it adds inconveniently to the general noise).

(h.) Each group of desks should be separated from the contiguous group, either by an alley 18 inches wide for the passage of the children, or by a space of 3 inches sufficient for drawing and withdrawing the curtains.

(i.) The curtains when drawn should not project more than 4 inches in front of the foremost desk. An alley should never be placed in the centre of a group or gallery, and the groups should never be broken by the intervention of doors and fire-places.

(j.) Where the number of children to be accommodated is too great for them to be arranged in five, or at most six, groups, an additional school-room should be built, and placed under the charge of an additional teacher, who may, however, be subordinate to the head master.

1. The walls of every school-room and class-room, if ceiled at the level of the wall-plate, must be at least 12 feet high from the level of the floor to the ceiling; and if the area contain more than 360 superficial square feet, 13 feet, and if more than 600, then 14 feet.

2. The walls of every school-room and class-room, if ceiled to the rafters, and collar beam, must be at least 11 feet high from the floor to the wall-plate, and at least, 14 feet to the ceiling across the collar beam.

3. The whole of the external walls of the school and residence if of brick, must be at least one brick and a half in thickness; and if of stone, at least 20 inches in thickness.

4. The doors and fireplaces in school-rooms for children above seven years of age must be so placed as to allow the whole of one side of the school-room being left free for the groups of benches and desks.

5. There must be no opening wider than an ordinary doorway between an infants' and any other school-room, as it is necessary to stop the sound of the infant teaching.

6. An infant school should always be on the ground floor and if exceeding 80 children in number, should have two galleries of unequal size, and a small group of benches and desks for the occasional use of the elder infants.

No infant gallery should hold more than 80 or 90 infants.

7. The width of a boys' or girls' school-room must not exceed 20 feet.

The width of an infant school-room need not be so restricted.

8. The class-rooms should never be passage-rooms from one part of the building to another, nor from the school-rooms to the playground or yard.

9. The class-rooms should be on the same level as the school-room.

10. The class-rooms should be fitted up with a gallery placed at right angles with the window.

11. Framed wood partitions are not allowed between school-rooms and class-rooms. They must be separated by lath and plaster partition or a wall.

12. Infants should never be taught in the same room with older