

but the most valuable work of all is that which imparts a knowledge of form, colour, and the properties of materials, at the same time that it fosters manual dexterity.

- (b.) It should admit of being dealt with in a progressive course.
- (c.) It must be attractive to the children, and afford a welcome relief to other studies.
- (d.) It must not involve the use of needlessly expensive materials.
- (e.) It must be capable of being practised in an ordinary schoolroom, without risk of harm to children or damage to furniture.
- (f.) It must, in cases where the classes are as large as the Code permits, be so simple that it does not require an undue amount of individual attention. Large classes should, where possible, be subdivided for these occupations.
- (g.) It should avoid a long series of preparatory exercises apart from finished results, and the finished article should be one that is attractive to a child. At the same time, the construction of articles for sale is undesirable.

3. The manual occupations satisfying these conditions which have been most commonly adopted as specially suitable for the First, Second, and Third Standards are: (a.) Modelling in clay. (b.) Modelling in cartridge or cardboard paper. (c.) Cutting out in paper or other material. (d.) Drawing and colouring designs (some original). (e.) Brush-drawing from the object and from recent impressions. Other equally useful occupations may no doubt be devised, and any occupation that is proposed, if it is likely to prove satisfactory, will be readily accepted by the department.

4. It appears that the various manual occupations which have hitherto been introduced for the lower standards because of their suitability resolve themselves into exercises in the studies of (i) form, (ii) colour, (iii) measurement, which should be, where possible, connected with other subjects of instruction.

- (a.) For acquiring a knowledge of form, the most effective occupation is clay-modelling. It demands accurate observation of the object which is chosen as a model, and the accuracy of the observation will largely depend upon previous instruction as to the build or growth of the object in its natural state. Sometimes a lesson on modelling has followed one on natural history or science; sometimes the children, after an object-lesson upon the formation of a fruit or the germination of a seed, have modelled the object, thus at once testing the correctness of their impression and driving it home. Clay-modelling has been used to illustrate the geography lessons; for example, the children construct a model of the river basin in which they live; and, again, illustration has been found for the history lesson in constructing a model of some neighbouring encampment, whether square or circular, Roman or British. As a knowledge of form depends upon a close observation of light and shade, a lesson in modelling greatly furthers instruction in drawing. Clay-modelling, however, lacks the charm of colour.
- (b.) Colour may be studied in the following ways. When care is taken to provide a variety of tasteful shades of coloured paper, it is possible to combine the drawing, cutting-out, and mounting of a number of good designs, many of which may be in respect both to pattern and arrangement of colour the original work of the children themselves. The drawing may be done partly by aid of rulers and templates and partly freehand. The use of templates makes it possible to stamp on the mind certain beautiful curves at an earlier age than children can draw them freehand. This kind of exercise has been very fully developed by some of the officers under the London School Board. The advantages of it are that it promotes accuracy and good taste in colour and design, and also a sense of harmony and proportion. The defect of it is that the manipulation is somewhat monotonous, and that it does not lead to much increase of knowledge of varied objects.
- (c.) Brushwork demands a clear perception of form and some knowledge of natural objects, and cultivates delicacy of touch; but it does not train the student to great accuracy or cultivate the sense of colour. Children, however, can express their impression of a flower, as, for instance, a bluebell and its leaves, much more easily by the brush only than by the pencil, and, if their observation has been very inexact, the error becomes obvious when they try to draw their impression.
- (d.) As an exercise in accurate measurement, cartridge-paper or cardboard modelling leaves little to be desired. This work is an excellent training in exact measurement and in cutting true to measure, and it furnishes an elementary notion of construction. The manipulation, however, in this exercise also is somewhat monotonous. This kind of work lends itself readily to the illustration of instruction in simple geometry. The beginner may learn to cut out in cardboard, or, more readily still in stout drawing-paper, simple plane geometrical figures, and, after a time, he may proceed to simple geometrical solids. The cube, the cone, the cylinder, the wedge, the prism, and the pyramid can all be drawn, cut out, and put together without much difficulty. The manufacture of various useful articles, such as blotting-books, frames, trays, and the like, can be combined with the formation of geometrical figures.
- (e.) As no one of the branches of manual occupation is complete when taken by itself, the most satisfactory results will follow where it is found possible to make them supplement each other.