

in the training colleges, to the increasing number of books now available for teachers in which handwork in its varied forms is dealt with in its relation to the ordinary subjects of instruction, and to a more general and clearer understanding of the intimate connection between the brain-development of the child and his manual and motor activities.

Concurrently with the growth of interest in and knowledge of handwork there has been an increase in the number of schools into which one or more forms of handwork have been introduced, so much so that it is the exception to visit a preparatory department without finding its stock of paper, or plasticine, or bricks, or colour-boxes, or weaving-apparatus and material constantly in use for illustrating and enforcing a lesson in numbers or word-building or nature-study.

An increase is also noted in the number of schools in which facilities for carrying out some form of handwork are provided for the standard classes between the preparatory and upper divisions of the school. It does not appear possible to have so much variety in these classes as in the lower divisions, as the ordinary work demands more time for the formal studies; but increasing provision is made for a course of instruction in brush drawing and for a graded course of cardboard-work.

The extended use of cardboard is particularly gratifying, as it is considered that this material readily lends itself to a variety of teaching purposes; it is easily cut and manipulated, and if intelligently used can be made a most helpful ally in teaching arithmetic, drawing, geometry, mensuration, &c.; cardboard-work can also be made an excellent preparatory training for the course in woodwork; and in districts where provision for instruction in the latter subject is not practicable the more advanced exercises in cardboard-work appear to be an admirable substitute for it. A course arranged on some such lines as the following affords excellent manual and mental training, provided that it does not degenerate into mere "copying," and that throughout the course pupils are stimulated to think for themselves. After a series of exercises in "flat work," exercises in (1) the construction of simple box, tray, and bowl forms, with vertical and sloping sides; (2) the mensuration of the surfaces of these forms; (3) elevations and plans, isometric or oblique views, and freehand sketches of these forms; (4) methods of finding the length of sloping edges of an object when the angle of slope and the linear dimensions of the sides are given; (5) setting out nets (or alternative nets) either from dimensioned drawings or from actual objects; (6) construction of simple geometrical solids and of objects based thereon—*e.g.*, cube, wedge, prisms, single and double pyramids, truncated solids, crosses, stars, obelisks, vase-forms, block letters (A.E.W.X.); (7) very simple cases of sections of geometrical models; (8) internal volumes (capacities) of solids by the sand methods; and other similar exercises.

There appears to be no reason why girls should not participate in the instruction in cardboard-work as long as it does not interfere with the sewing-lesson, as it would afford them opportunities of doing a little construction-work demanding care and a standard of accuracy not generally called for in most phases of their work. The increasing number of inquiries from teachers and others about this work, and for books thereon, appears to show that a good deal of attention is at present directed toward it; and the hope is expressed that arrangements will be made in districts in which teachers appear to have had few opportunities of learning the use and value of cardboard-work for courses of instruction to be given by competent instructors.

*Woodwork.*—The progress noted in previous reports has been maintained, and when it is remembered that the majority of the instructors are artisan-teachers who have few opportunities of studying teaching methods, or of seeing other classes than their own in session, the improvements made appear all the more gratifying, as they bear evidences of real effort on the part of instructors to increase their efficiency.

Probably the most noticeable advance has been made in the attainment, generally, of a higher standard of accuracy in both drawing and bench-work than has previously obtained. The careless, slipshod drawing is slowly disappearing, and in many instances the number of models completed during the year has been reduced so as to permit of more attention being given to minor details and finish.

As instructors have at all times shown their readiness to respond to suggestions about improvements in their work and to try new methods, with a view to increase the value of the instruction to the pupils, encouragement is given to make further suggestions, which on this occasion are wholly confined to matters in connection with the drawing-lessons, as it is considered that a great deal more use could be made of this valuable instrument of intellectual development.

Speaking generally, the drawing-lessons at most of the centres are, as far as they go, very thorough. No exception can be taken to the manner or to the matter of the lessons, but the method is at times questionable. The practice generally adopted is for the teacher to make a dimensioned blackboard sketch, which the pupils copy, either full size or to scale. In some instances the pupils' and the instructor's drawings are made simultaneously, line by line; in others a completed sketch is copied, the pupils following instructions as to where and how the several lines should be drawn; and it is contended that, while certain ends may have been achieved, such lessons make very little demand upon the pupils' intellectual powers. At the close of the lesson the pupil may or may not have carried out the precise directions of the teacher, but all the thinking has been done for him, nothing is left to the imagination, and the lesson, instead of encouraging and stimulating the pupil to think for himself, has, it is feared, had the opposite effect—it has tended to make him intellectually lazy. Until pupils have gained facility in the use of drawing-instruments, and understand the planes of projection, and the method of setting out a drawing, copying is permissible; but as soon as this knowledge is gained no more copying should be allowed, and the whole of the drawing should be made from the model direct, or from sketches of it made by the pupils in their notebooks. This method has been adopted with good results at a few centres, and it is considered that as soon as sufficient models are available it might with advantage be tried at every woodwork centre in the