

woodwork it is not likely to prove a serious difficulty if once the desirableness of the instruction is recognised.

But I come now to a difficulty of the gravest and most real character—viz., the question of staff. The very general introduction of manual training into the schools of the district is, as I have remarked elsewhere, the outcome of a spontaneous movement on the part of the teachers, especially in the infant departments, and is in no way due to pressure on the part of the inspecting staff, whose attitude has been mainly one of observation. But however disposed we might be to urge the claims of the subject on their attention, we are of necessity dumb when we find teachers—women—in charge of classes of over eighty children, without any help, or in charge of a hundred to a hundred and thirty with the aid of a pupil-teacher. However we may think that in the long run it may help to relieve and brighten their labours, we cannot possibly ask them to undertake any additional work. It is greatly to their credit that work of this kind should have been so generally attempted and so well done, and the ingenuities of organization elaborated for the purpose are worthy of all praise. These large classes occur even under the Edinburgh Board, which has long and deservedly had the reputation of being most liberal in staffing its schools. I am glad to say, however, that the Board has presently under consideration a scheme by which the staff of each school will be still further strengthened. I shall regard it as not the least of the merits of manual instruction if its necessities shall lead to the formation of more correct ideas as to the number of children who can in ordinary circumstances be effectively taught at one time by one teacher. It is of the essence of manual training to be individual. It is in this respect the very antipodes of class-teaching, and consequently the number whom a teacher can effectively supervise is strictly limited. In the case of any of the more advanced forms of manual work that is now an accepted principle, and twenty to twenty-five at most are taken at a time. Even this number is considered by some excessive. It does not follow, of course, that there must be a teacher for every twenty-five children, but that for this subject the children must be taken in sections not exceeding that number. But this arrangement is barely possible with the present average staff of a school, and if manual training is to be effectively carried out that staff must be proportionately strengthened.

But probably some increase of staff is equally to be demanded in the interests of effective instruction in other class-subjects as well. The need for individual instruction is generally regarded as a peculiarity—the merit or demerit—of manual training, but it may be questioned whether it is not a characteristic of all really effective teaching in any subject whatever. The one subject which can be taught by the class method pure and simple is drill. It is useful also in an object- or demonstration-lesson, where some simple and easily-understood fact can be shown to a large number at once. Even here a very little experience will convince the amateur in school methods that the possibilities of misconception among children are endless. But when we come to such a subject as grammar, for instance, the attempt to carry on the work simply by means of class-teaching breaks down hopelessly. Even the most lively and skilful presentation of the subject in the class-lesson will fail of its effect unless it is followed up by patient individual dealing. For one collective lesson, if the subject is to be effectively taught, there must be half a dozen where the pupils are taken sectionally for individual teaching. Scattering questions promiscuously over a class of eighty or a hundred children is not enough. With the average teacher in ordinary circumstances there is no certainty that all the children, or even a large proportion of them, are making any active intellectual effort. They are either inert, trusting to escape the question, or, if forced to respond, content themselves with some stereotyped answer of which they have learned the trick. The individual teaching which is a necessity of manual training is only in a small degree, if at all, less necessary in such a subject as grammar, and in the ordinary school additional staff is greatly needed in the interests of the one as well as of the other.

It goes without saying that, if manual instruction is to be successfully given, the teachers of the subject must possess the requisite technical skill. Ideally, of course, that skill would be most appropriately acquired in the training colleges. But no one who has regard to the amount and the distracting variety of work at present undertaken in these institutions could venture to propose any addition to the curriculum. Whether some reform of that curriculum is on other grounds desirable I cannot here discuss. But I believe that a very adequate preparation for this kind of work might be secured in the case of the majority of future teachers if provision were made in the schools of the large towns where manual training has been to some extent developed for some systematic instruction of the pupil-teachers both in the theory and practice of the subject.

Other teachers who wish to introduce the subject must, I fear, make some sacrifice of their leisure time, as many have already ungrudgingly done, and qualify themselves as best they may by attendance at special classes. The amount of technical skill needed varies greatly with the different exercises. The Sloyd Association of Scotland aims at providing courses under competent teachers in such subjects as clay-modelling, cardboard-work, and woodwork wherever there is a demand for them. Similar courses have been held in connection with the Aberdeen branch of the Educational Institute. A sloyd class is held in the holiday season in connection with the Edinburgh summer gathering. Classes for the instruction of teachers in woodwork have been conducted under the auspices of the Edinburgh Board by the chief woodwork instructor, and doubtless many of the evening classes held in technical and science colleges will afford opportunity for acquiring the necessary skill.

A considerable number of teachers from Scotland have attended holiday courses at the great training-schools of Nääs and Leipzig, and the value of the wider experience of matters educational to be gained at these institutions can hardly be exaggerated. At Nääs, through the generosity of the founder of the institution, Herr Abrahamson, no payment of any kind is required for instruction or use of tools and materials, and in the summer and autumn courses the lectures and instruction are given in English. Last year the committee on technical education of the Dumfriesshire County Council—as many County Councils in England have also done—undertook to pay the expenses of some public-school teachers from the county at Nääs or Leipzig, in order to qualify them for