



Notes
for
Instructors
on the
Principles of Instruction
1939

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By Command of the Army Council,

H. J. CREEDY

THE WAR OFFICE,
30th June, 1939.

I wish this pamphlet to be read by all instructors.

In view of the recent expansion of the Army, there are many officers and non-commissioned officers who have had little experience of teaching. To them, this pamphlet will be of especial value.

It has been written by an expert in the subject of teaching, who also fought in the Great War, Mr. J. H. Panton, M.A., Senior Lecturer in Psychology and Education, Borough Road College, formerly member of The Inns of Court Regiment and The Duke of Cornwall's Light Infantry.

GORT,

Chief of the Imperial General Staff.

DISTRIBUTION

These notes are issued on a pool basis to units stationed at home.

The scales for units of the Regular and Territorial Armies, and the Supplementary Reserve and for Militia training units are as follows:—

<i>Cavalry</i>	
All regiments	30
<i>Artillery</i>	
All regiments	50
<i>Engineers</i>	
All field companies.....	18
<i>Signals</i>	
Corps and divisional signals.....	40
Independent companies, etc.	5
<i>Infantry</i>	
All battalions	50
<i>Army Service Corps</i>	
All companies	15
Training Centres and C.S.A.S.	each 50
District H.Q. (Pool)	50

4

NOTES TO INSTRUCTORS ON THE PRINCIPLES OF INSTRUCTION

1. *The objects of training*

The objects of training are laid down in the various manuals of the different arms. Instructors are advised to familiarize themselves with these objects and to keep them in mind throughout their instruction. A clear idea of the aims and purposes of any teaching is essential if that teaching is to be really effective.

There are some principles of instruction common to all branches and the more important of these are indicated in the sections which follow.

A successful instructor should know not only his job as a soldier, but something of the ways in which the minds and bodies of recruits work and of the most effective and economical way of learning and teaching.

2. *How the recruit learns*

A recruit, on first joining a unit, has much to learn which may contrast strikingly with his ordinary civil life. He will learn a great deal of what is required indirectly without any special instruction. Consciously and unconsciously, by imitation of those around him, he will pick up many of the traditions, customs and ideals of the service which he has entered. The habit of cheerful unhesitating obedience to authority is an example of one of the many things that are best learnt in this way by actually participating in the life of an organization where this is the rule.

One of the most important functions of an instructor is to help the recruit by suggestion and example to fit into his new rule of life. He should always remember his

responsibility for indirect instruction of this kind and, at all times and in all circumstances, he should endeavour to incorporate in himself and in his attitudes the very best traditions of the service.

Direct instruction.—Important as indirect learning is in the development of a recruit into an efficient soldier, a large part of the time available must necessarily be spent in direct instructions in the various details of the soldier's work. Among other things he must be trained to be confident and expert in the use of his weapons, and to co-operate with his fellows in drill movements essential to enable him to take his proper place in a controlled and flexible unit. All these aspects of a soldier's life will need careful teaching, and the most valuable ally that an instructor can have in this work is the recruit's own "will to learn."

3. *The principle of interest*

Instruction is most effective when the will to learn is present, and this comes when the recruit is interested in the work in hand. It should therefore be the object of the instructor to seek out methods whereby he can stimulate and maintain the interest of the recruits. Among the many ways of doing this are such aids as variations in the work, avoidance of *over-fatigue*, grading of work to suit the stage reached by the recruit, and the exhibition of an enthusiastic interest in the work in hand by the instructor himself. Enthusiasm is infectious, and an enthusiastic instructor will obtain a better response from his class than one who may be equally competent in his subject, but who lacks the power to communicate his enthusiasm.

The appeal to the interest of the recruit does not mean that no disagreeable tasks are ever to be performed. A certain amount of very hard and possibly somewhat dull routine work is necessary if a recruit is to master all that he should know and be able to do. But this work should be purposeful and the recruit should know why he is being called upon to do it. Drudgery as such has very little value even from the disciplinary point of view.

Competition is very useful in maintaining interest. Individual competition should not be overdone lest it unduly depress the slower members of the squad. Collective competition is more valuable in obtaining the co-operation and interest of individual members, and in leading to a healthy pride in their unit.

Interest may also be stimulated by appeals to the recruit's intelligence. Understanding helps performance and men do best that which they understand best. For example, the knowledge of the mechanism of a machine gun or a rifle will add interest to the appropriate drills, since their purpose will be realized. The recruit is also helped to avoid some of the fundamental errors. Explanation should be simply and clearly worded, freely illustrated, to the point, and not too long. Questions will help the instructor to see whether his explanations have been appreciated. These should be economically worded, free from ambiguity, to the point, and asked at the right time. On occasions it may be advisable to invite questions from the recruits. These will often reveal misunderstanding and give the instructor a hint as to the proper course to take in removing misconceptions.

Above all, the instructor should endeavour to understand the recruits' point of view and to follow the workings of their minds. It is advisable to avoid sarcasm, which sets up an undesirable and hostile relationship. It is better if his attitude is one of sympathy and understanding. Sympathy in this sense does not involve "softness," but rather the ability to develop in the recruits an attitude of confidence in their instructor, whom they should come to respect as a first rate soldier, anxious and able to help them to learn their job. The instructor can help to develop this attitude by his personality, perseverance, tact and understanding, and by his insistence at all times on the very best work of which the recruits are capable. At no time should he accept any slipshod work, and his ability to distinguish between "rawness" and carelessness is an important factor in his success as an instructor.

Interest and the will to learn are helped by success on the part of the learner. Continual failure depresses and the learner tends to lose heart. Instructors, therefore, should commend good work, not only on the part of the quicker recruits, but also when some improvement is shown by the slower learners. Whilst he should not hesitate to point out the extent by which any effort fails to reach the required standard of efficiency, the instructor should reserve serious reproach for those efforts which are accompanied by slackness or carelessness. The justice of this is realized by all concerned and the co-operation of the recruits is more readily secured.

4. *The training of habits and skills*

A considerable amount of the recruit's training will be directed towards the development of his ability to control

his own body in the carrying out of drill movements, and in developing skill in the use of his weapons, etc. This is mainly a matter of the development of correct habits of action and thought.

A habit is something which is performed with little or no conscious attention to the details of the way in which it is carried out. It is a matter of "second nature." An efficient soldier has developed those habits which give him automatic control over his movements and skill in the use of his weapons, leaving his mind free for the exercise of judgment and initiative when these are required.

The machinery at a learner's disposal for developing habits of action consist of his nervous system and his muscles which, by contracting or relaxing, move the bony structures of his body. Nerves connect up to his brain (the H.Q. of the nervous system) and bring in messages from the sense organs of touch, sight, hearing, etc. Other nerves carry messages outwards from H.Q. to the muscles, which respond by moving parts of his body. When, as a result of training, messages received by H.Q. automatically result in the despatch of messages to the executive muscles, which respond unerringly by a particular pattern of action, a habit has been learned.

When a learner wishes to acquire a particular skill, he usually watches another performer. He then attempts to imitate him. If his attempts meet with some success, he feels a certain amount of satisfaction and repeats the actions until he can perform the operation with ease and increasing skill. Further practice seems to knit the connections in the nervous system so as to form a pattern which is all the more ready to go on repeating itself.

Repeated failure, however, gives no satisfaction to the learner and he may eventually give the whole thing up as a bad job.

There is, however, a real danger in habit development which should be guarded against. Of all the possible responses which the nerves and muscles can make to any situation in the early stages of learning a skill, only the obviously unhelpful ones are likely to be dropped as the practice develops. Sometimes movements which are not particularly helpful become incorporated into the system and, if they are not detected at an early stage and corrected by the learner, they may never be completely eliminated. Little defects of this kind, for example, often prevent men from becoming good rifle shots.

There is another characteristic in the development of a skill which is especially noticeable when it is fairly complicated. A skilled man, for example, taking up the lying position, loading, sightsetting and unloading, will go through the movements cleanly, smoothly, economically and in their correct sequence. The unskilled recruit on the other hand is clumsy; he makes unnecessary and possibly jerky movements; he may be hesitant and doubtful regarding the correct sequence of these movements. The chief difference between the two performers is that for the former all unnecessary movements have been eliminated, the correct ones have been well established and all the components of the skill have been knit together so as to give him quite automatically smoothness of action and ease of control. The clumsiness of the beginner is due to the fact that he has not yet reached the stage in which the separate units of the

movements have been knit together into a harmonious whole and some useless or unnecessary movements may still be present.

5. Principles of instruction

From a consideration of the foregoing section it will be seen that the development of a skill is a matter of practice under favourable conditions of an imitated model. This supplies the key to the most effective methods of teaching.

Instructors are recommended, whenever possible, to introduce a new movement by a short explanation, which should aim at arousing the recruit's interest and giving the subsequent work a purpose. These are essential to the favourable conditions referred to above (*see under "The principle of interest"*).

Demonstration of the movement is the next step.

It is usually advisable to demonstrate the whole movement first, or at least a suitably comprehensive sub-unit of the movement, since the recruit has ultimately to build up a smoothly working system and it is an advantage for him to know at the very beginning how each part fits into the whole.

Demonstration and explanation of the several steps will follow. These should aim at showing exactly the way in which each movement is produced, and the responsibility is on the instructor for setting a correct model before the recruit and for indicating clearly and concisely the exact details of the movement.

Practice by the squad follows demonstration by the instructor. The basis of the activity is imitation of the model set before them. This is the stage requiring the

keenest attention and most patient observation on the part of the instructor. He should watch carefully to see that hindering or unnecessary movements are pointed out and corrected by individual recruits, and he should give individuals all possible assistance in selecting the necessary successful movements.

It is only half true to say that "practice makes perfect." Progress depends mainly on the nature of the practice, which should ideally be the imitation of a perfect model by an interested person who is practising correct movements only. The nearer the instructor can bring his squad to this ideal, the more successful his teaching will be.

The importance of proper practice cannot be over-emphasized. The recruit learns much more by doing than by listening. The required co-ordinations of his nerves and muscles can only be brought about by actual exercise. Instructors should therefore rely more on practical work and the recruits' responses than on verbal exposition. They are advised, therefore, to cut their explanations to a minimum consistent with effectiveness.

6. Progress in the development of skills

Instructors are warned that progress in learning acts of skill is not necessarily a steady and continuous business. There are often arrests or even setbacks in development. For example, when the separate components of a complicated movement or chain of movements are practised so as to knit them together, learners sometimes show startling and disappointing awkwardness even in those parts which have apparently been thoroughly mastered previously. This calls for constant watchfulness and correction on the part of the instructor, and it is at this

stage that encouragement and assistance are more important than ever. Some stages are never passed by certain individuals through disappointment and discouragement at times like these.

Over-fatigue, especially of the finer muscles of the hand and eye, is also a fruitful source of arrested or faulty development. When this occurs, control becomes erratic and continued practice is likely to bring wrong movements into play. Over-practice combined with over-fatigue will often lead individual members of a squad to form by exercise faulty habits of control. A change of occupation or period of rest is recommended whenever signs of this appear.

No hard and fast rules can be given regarding the length of effective practice periods at any one particular skill. It depends on the physical state of the men, on their interest and on the nature of the skill. Sympathetic watchfulness on the part of the instructor is essential.

It must also be remembered that individual recruits will vary in their rates of progress. Some will be naturally quick in their development of skills. They seem to be endowed with readily adaptable machinery for learning new movements and co-ordinating nerves and muscles. Others are naturally clumsy or slow in development. It is the instructor's task to get from every man the utmost efficiency of which he is individually capable. Provided, therefore, that the awkward members of the squad are making their maximum efforts, they should meet with encouragement and never with reproach, which will only tend to make them clumsier than ever.

It is often valuable on account of the differences in individual rates of progress to have a period of individual practice when each man practises a movement "in his own time." Careful supervision is of course necessary, and the period must be followed *immediately* by a collective practice in all cases of unit drill movements.

7. *The instructor's preparation*

Successful instruction depends very largely on very careful preparation on the part of the instructor. Not only must he be able to demonstrate a movement as a model, but he must also be able to demonstrate the component parts and explain exactly their nature. He should also have a clear idea of the method to be used in teaching these movements, and of the difficulties likely to be encountered by the learners. He must be prepared to adapt his methods to the particular squad that he is teaching according to their varying natural abilities. All this will require much thoughtful preparation *before* the actual drill period.

In order to use the time available to the best advantage, all the apparatus required should be got ready and kept at hand *before* the lesson begins, so that the work can proceed smoothly, without delay or unnecessary interruption. The drill activity should be carried on, moreover, with as realistic a basis as possible, in order to stimulate keenness and maintain interest. It is perhaps necessary at times to call upon the recruits' imagination and to instruct them to go through a movement in "dumb show" only. For example, when performing respirator drill, the squad may be told to "go through the motions" of placing their rifles between their knees

when adjusting respirators, but it is far better, whenever possible, for them actually to have their rifles with them. The recruit then gets the "feel" of the real thing and the whole movement is practised and consolidated in the form in which it will ultimately be used.

8. *Learning, involving knowledge rather than muscular skill*

The training of the soldier according to the objectives necessary for his particular arm will involve not only his acquisition of skills, but also of a considerable amount of general and specific military knowledge, to enable him to direct his activities in an intelligent fashion and to exercise initiative and self-dependence.

Direct teaching for these purposes will usually take the form of lectures or talks. These need very careful preparation by the instructor, whose aim should be to interest the recruit in the topics with which he is dealing. He should endeavour to make the more important features stand out clearly. A few of these well dealt with are preferable to a lecture overloaded with facts. The instructor should try to develop a clear, concise and easily comprehensive exposition, well illustrated by reference, wherever possible, to the recruit's actual experience. Knowledge is most readily acquired by interested learners dealing with situations which are within the range of their real life experiences and which have a practical foundation. The use of cover, for example, can most effectively be taught by talks illustrated by actual experience in suitable country, and followed by practical exercise on the part of the recruits.

Some topics, however, are not so easy to deal with practically as the above, e.g., those connected with personal and military hygiene. These should be dealt with simply and illustrated, wherever possible, by references easily appreciated by the listeners. Suitable diagrams and illustrations are most useful aids to a really effective and vital bit of teaching by the lecture method. They should be selected and used with a view to making the essential and important features stand out well in the listeners' minds.

Throughout the talks the instructor should watch the effects of his work on all the listeners, as the success of his teaching is to be measured by their reactions. His words should set them thinking, gathering new ideas, sorting them out and anticipating what is coming. He must know his subject thoroughly, be able to select the important points and present them effectively with the minimum of words.

9. *General note*

Throughout all instruction the instructor should keep in mind the general purpose of the whole of the recruits' training, together with the special purpose of each piece of instruction which he undertakes. He must remember how this fits into the whole scheme, what has preceded it and what is to follow. He should plan and conduct his work with these considerations in mind.

Successful instruction is mainly a result of mastery over one's job, knowledge of the effective methods of teaching, understanding of the workings of the recruits' minds and of their abilities and limitations, and, perhaps

what is most important of all, enthusiasm for the work. The more an instructor is able to communicate this enthusiasm, the better. It is the individual recruit who is the ultimate teaching unit and who must be stimulated to make the required efforts on his own behalf which will lead him to become an efficient soldier. The instructor, by his example, skill and knowledge and care, can guide the learner's efforts in the right direction most effectively when the will to learn is present.