

mately be possible to get an existing home-based seedhouse interesting in doing the processing once the collecting has been done.

HOW TO TEACH ONE'S OWN SKILLS TO MEMBERS OF STAFF

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THE NEED. The title I shall discuss is concerned with training, an integral part of the management function in a business. If the training function is to be effective, it must be based on the needs of the company and industry. This conference has highlighted some excellent examples of needs justifying planned training and these new techniques and information have to be transferred to those who are paid to apply them.

The examples of training need include —

- i) New propagation techniques
- ii) New information concerning growth regulants
- iii) The new entrant and casual worker who frequently enter a business with little or no related skill
- iv) The member of staff already employed whose output/quality of work is not quite in line with the company's standards. For instance, budding rates and percentage take can vary quite dramatically within a gang of staff working in the same field.

As a Training Board, we have evidence that a three-day training course can very quickly improve the rate of work and the percentage take. As a trainer I see training as an economic activity — not just a social duty, and management effort in this direction should result in —

- extension of staff knowledge
- developed ability and, above all, an attitude to work that produces satisfaction to both staff and the boss.

I have tried to put the title of the talk into perspective. Clearly the teaching of practical skills to one's own staff is just one part of an overall training policy based on the needs of the company. This is a vitally important part, particularly in an industry that uses a large number of casual labour and young entrants.

SKILL. Let's look at the word "skill" for a moment. As a trainer, and indeed any person concerned with the effective transfer of skill, we must believe that skill can be acquired — that it is not inherited but learnt. Granted, not all of us will make skillful knifemen or budders, but given the right aptitude, training can develop a person's ability in any practical skill far quicker than learning by experience. For those who believe that the good budder has a "knack", or that propagating dwarf conifers is an art, their training will not be effective. The professional trainer believes that practical skill contains three main ingredients:

KNOWLEDGE — essential to the job

DEXTERITY — the exact movement of limbs

PERCEPTION — the way in which the senses are used

and before any teaching of skill can take place, it must be broken down into these three parts.

Allow me to cite the example of budding roses:

KNOWLEDGE	Selection of the appropriate bud — knowing how to recognize this.
DEXTERITY	Handling of the knife when removing the bud
PERCEPTION	The use of the eye when removing the bud

Anyone who is highly skilled in grafting will recognize the right-hand column as common sense and even obvious. The real difficulty lies in putting this information over to the trainee. So many of the actions, particularly in the areas of dexterity and perception are carried out subconsciously and consequently ignored when teaching other people. So often the instructor in this situation has talked to the trainee and given him all the knowledge he requires, without mentioned the precise finger movements or how he should use his senses. The trainee "has a go" and cannot do the job he has been taught, so you hear the instructor say —

"Don't worry boy — it'll come!!"

What in fact he should say,

"I'm sorry I am not exactly sure how I do the job — Sorry I can't help you".

To avoid this situation the job must be broken down and the vital teaching points clearly identified. This, in itself, is a skill and anyone selected to act as an instructor in a business requires training in analysis techniques. As a trainer of instructors I spend 50% of the course time training them to break down their own skills in order to recognize the correct teaching points. The effective instructor requires a high degree of ability and analysis techniques and this really needs noting when it

comes to selecting a member of staff as an instructor.

THE INSTRUCTOR. We now need to turn our attention to the person who instructs. What does one look for in a good instructor? He must have certain qualities, not least of all, willingness to help people to learn and acceptability to others coupled with ability to instruct. Training can do little to help develop the qualities and, therefore, evidence of these qualities should be seen in those selected to instruct. The abilities of the instructor are more important and a critical consideration in the training of an instructor. I would like to discuss five main abilities that he must either have or develop.

Able to do the job in which he instructs. I firmly believe the successful instructor must be recognized as skillful in the eyes of those he instructs. Credibility is vital and is clearly a consideration when selecting instructors. Paper qualifications are not sufficient evidence at this level of training.

Able to analyze the skills. I have dealt sufficiently with this aspect. Skills analysis can be taught and at the end of a 4-day Instructional Techniques Course, an instructor can readily identify the important points to be emphasized. This attitude towards skill is central to the effectiveness of an instructor.

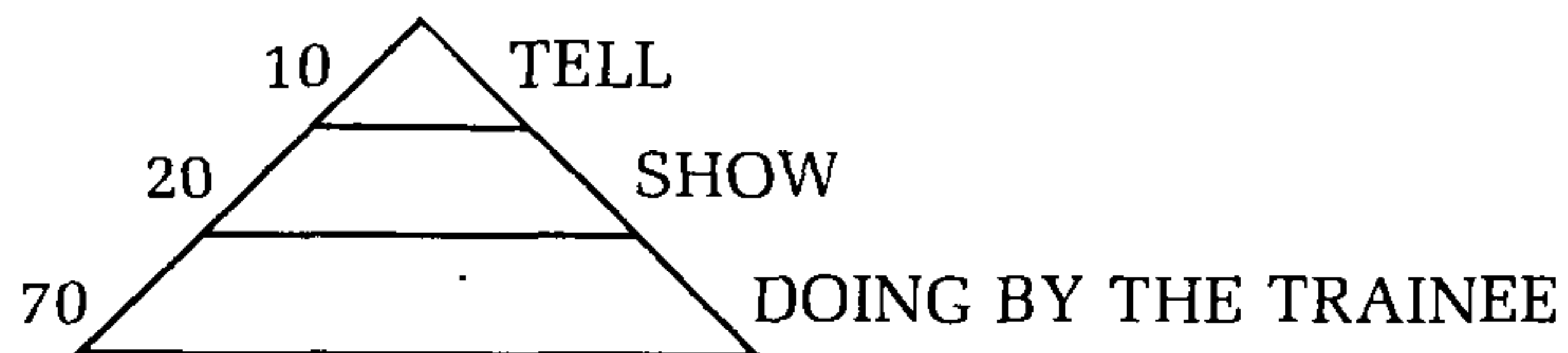
Able to apply the principles of learning. People only receive information through the senses. The ears are the weakest sense of all — sight and touch are the most powerful channels in which to feed information. Any instructional situation therefore should substitute telling for showing or demonstrating the job to be taught, leaving plenty of time for the trainee to practice. It is only when the trainee practices the skill that the dexterity and perceptual areas can be learnt. This is, of course, provided the instructor clearly recognizes the learning difficulties the trainee should be experiencing. Even more fundamental to applying the learning principles is the knowledge that people learn easier if information can be acquired in a logical sequence and can be absorbed in small quantities by the trainee. Not least of all, people can understand very easily if new knowledge and skill can be associated with something they already know or can do. Breaking a skill down into a logical sequence and thinking of “links” with the trainee’s existing skill and knowledge takes preparation time; I cannot over-emphasize the need to give those members of staff who instruct, time to prepare.

Able to be objective. The theorists of motivation believe that people enjoy knowing what is expected of them and whether or not they have achieved the goals set.

This principle must be applied in the instructional situation. The instructor must have a measurable objective which

states what the trainee will be able to do at the end of the training. This statement should also be communicated to the trainee, thus helping both trainee and instructor to recognize the extent of their achievement.

Able to use participative techniques. Involving the trainee and continually giving him feedback or knowledge of progress is a powerful aid to learning. The design of the training should incorporate these two aspects. A theme that we have established on our own Instruction Techniques Course in the A.T.B. is;



Within this framework, involvement and feedback can occur.

THE TRAINEE. “If learning is not enjoyable it is not worth doing” — is a phrase which the instructor should always remember. The instructor can play a large part in ensuring the degree of enjoyment, but the trainee’s attitude is vital, too, and this of course is very much influenced by management. Providing the training needs have been clearly identified and the trainee senses the need for the training also, then the training objectives will be achieved. Where a training scheme at the place of work has failed, the problem has been lack of commitment and enthusiasm from the management, which is quickly reflected in staff attitudes.

This really brings me to a final point . . . if teaching skills to your own members of staff is to be effective, then a training system is required.

THE TRAINING SYSTEM. Ad hoc instruction is one approach and a lot of good training is carried out in this way. If we recognize that training is part of the management function then a declared system should be set up and all staff should be aware of its existence. The following features, in my experience, should appear.

All training to be carried out should be based on identified training needs and a written training programme prepared by both management and staff. The training programme should state the “when, where, what and how” and, of course, who instructs and who is to be trained.

Regular and planned times for training have proved to be a feature of successful training schemes — it is so easy to put off training when the pressure of work arises. Finally the selection of instructors and their training is the key to its success and, of

course, we have had the experience of training 3,500 instructors to date.

May I leave you one final thought that has been proved by experience: that if training is a part of the management function, then management should be seen to regularly guide, influence, and take an active interest in the programme of training agreed.

PROPAGATION OF JAPANESE MAPLES BY GRAFTING

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Several earlier papers presented at IPPS conferences concerning the propagation of Japanese maples have specifically described propagation by cuttings or winter grafting. At Exbury we propagate by summer grafting so a summary of our technique may help to complete the overall picture.

Understocks. Two-year seedlings of *Acer palmatum* are potted into 8 cm rigid plastic pots during the dormant season and stood pot thick in a cold frame or on a protected open bed until required for moving under glass. Towards late spring or just after new growth has started to appear the plants are cut back to 40-50 cm in order to facilitate handling at time of grafting. If this early pruning is overlooked the tops of the understocks can be cut back later in the year but it has been observed that late cutting shortly before grafting can severely reduce the foliar area at a critical time and weaken the plants. During mid- to late-June the potted understocks are transferred to a well-ventilated glasshouse and kept as dry as possible, without allowing the plants to wilt, for three to four weeks. Temperatures are maintained below 65°F, as practicable, by ventilation and shading.

Selection of scion material. Scions 10-20 cm long, preferably with three to four pairs of leaves, are selected from current season's shoots with a base of two-year wood 3-5 mm in diameter. One year wood with a firm base is also suitable, especially towards the end of the season when shoots are mature. Terminal growth should have ceased by the time scions are collected. All leaves are removed with secateurs, leaving 5-10 mm of petiole.

Grafting. Ideally grafting is undertaken between the last week in July and the end of August using a side veneer graft