THE ROLE OF THE TECHNICAL CORRESPONDENCE INSTITUTE IN THE HORTICULTURAL INDUSTRY IN NEW ZEALAND

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The original concept of education by correspondence was to offer tuition to students who, for defined acceptable reasons such as distance, poor health, disability, occupation, were unable to attend an educational establishment that offered the tuition they wanted, or who were living in areas where such tuition was not available. In some countries tuition by correspondence is regarded as simply a back-up, or support function, of a college or technical institute involved with students who are taught in the classroom situation. I wish to emphasise that in the case of the New Zealand Technical Correspondence Institute, Lower Hutt, this does NOT apply.

The TCI has expanded rapidly from a four tutor team in 1946 to become the foremost correspondence organisation in the Southern Hemisphere with a current student roll of over 20,000 and nearly 400 tutors.

Emergence, nearly 30 years ago, from a modest school, to the largest single teaching organisation in New Zealand has brought its share of the difficulties associated with rapid growth. That we have dealt with these difficulties is reflected in our expansion and examination successes.

One can reasonably ask why does the TCI continue to expand in these days of increased availability of study centres and when more and more institutes are being established? The reasons are many and varied but we think these three are worth highlighting:

- 1. The wide variety and depth of courses and subjects available far wider in scope than in any other technical institute in New Zealand.
- 2. The consistently high examination pass rate of TCI students when compared with students from other New Zealand technical institutes or schools.
- 3. The fact that TCI students can set their own study pace.

Students living and working in remote locations pose no problems for TCI. We reach out to assist any student no matter how far away he or she may be — we have over 1500 overseas students, most of them being in Australia and the other Pacific countries. Some are New Zealanders temporarily domiciled over-

¹ Tutor in Horticulture

seas, others are nationals in their own country. We can, therefore, easily reach any horticulture student within New Zealand.

The Written Word. We at the TCI specialise in the written or, as the students see it, the printed word. We take great care in technical accuracy and while realising that no two nurseries grow the same range of plants, have similar layouts, equipment or facilities, or the same soil and climatic conditions, we adhere to principles that can be applied anywhere.

Nevertheless our teaching material — we call them assignments — maintains the broad theory of horticultural practice in New Zealand whilst including many useful, practical descriptions of techniques and equipment that our horticultural tutors have known from practical experience.

The written word — as read by our students in their assignments is our teaching strength and gives us our reputation; we have to stand or fall by what we have written. The written word is much more lasting — and usually more effective from a teaching and learning viewpoint — than the spoken word of many lecturers.

The classroom tutor, because he or she is in front of a class of students, seems available for a personal, face-to-face, discussion. In practice, however, this is not always the case because the lecturer is not only obliged to keep fairly closely to the syllabus but usually his loading is a fairly heavy one.

Those students "up-with-the-play" usually get the most attention while the slower ones are constantly reminded that their studies and comprehension are falling further behind and that as individuals they are likely to adversely affect the lecturer's record of student efficiency — especially as reflected in examination results.

On the other hand, TCI tutors have the unique opportunity of encouraging students to ventilate their difficulties and problems by letter and by so doing, tutors are more helpful and tolerant of student problems; the relationship between tutor and student is an enviable one-to-one.

Don't overlook that — such is human nature — a student will often write to his TCI tutor about his difficulties that he'd be reluctant to discuss with a classroom tutor — especially in the presence of other students. We see many examples substantiating this.

Team Effort. Before I discuss some of the advantages of studying by correspondence, I'd like you to know that our assignments are produced by a co-operative team effort.

Even before the author begins to prepare his draft, many hours have been spent preparing a writing plan of initially subject, then assignment, content. Not only does the depth of treatment to be allotted to a topic receive careful consideration by at least four tutors, but the whole content of each assignment is carefully assessed and the sources of background material determined.

Throughout his draft preparation, the author is conscious of availing himself of the latest advice and material, and relating this to the time that will be ultimately demanded of the student in his home-study situation.

Technical editing — usually by a tutor colleague — is a continuation of the writing process and aims to ensure that the information in the author's draft is accurate and expressly fulfills the requirements of the course. Being free of the complex thought-train that encompasses the author, the technical editor views each statement independently and is thus well able to envisage how the student will understand it.

Presentation editing follows. Again this editor's priority is to see that the author's meaning is conveyed with the utmost clarity, that there is no ambiguity and that it is in a "language" suited to the age, knowledge and experience of the student level. The presentation editor ensures the ease of reading and contributes to the "eye-appeal" of the final, printed material.

Before the draft begins its progress through the Production unit — typing, illustration preparation, and preparation for printing — the Course Supervisor and Head of the Department concerned must approve and signify that they, too, consider that the material constitutes a fair contribution to the concept of the course, and upholds the high standard so carefully preserved over the years.

You'll gather from this, that — including the author — at least five members of the tutorial staff have been involved in the preparation of the draft to ensure that it promotes the interests of vocational education by providing the best study material possible.

All activities that contribute to the production of the study assignment are conducted on the site in Lower Hutt.

ADVANTAGES OF CORRESPONDENCE TUITION

Correspondence tuition has a number of advantages over classroom teaching and they apply to a much greater degree than most people think.

Some of these advantages to the students are that:

- 1. They receive personal and individual attention from their tutor.
- 2. They have equal opportunities for study no matter where they are living.

- 3. Their completed work is assessed fairly and accurately—there is no personal presence, or personality trait, to bias their tutor—and their tutor adds constructive comments for their guidance.
- 4. They receive study material in a simple form that their tutors will have specially arranged. Complex topics are "broken down" for their benefit.
- 5. They prepare themselves for future examinations by completing each set of Practice Exercises accompanied by answers for immediate self-checking and Test Papers, in a written form.
- 6. They do not miss a lesson or assignment. If they are ill the assignment is there when they are well enough to study it.
- 7. Their correspondence with their tutor is confidential fellow students are never informed of results other than their own.
- 8. They do not have to travel to and from classes. Time, expense, energy and frustration of travel can be avoided.
- 9. They can study while continuing their employment.
- 10. They develop self-discipline the most important point of all. Most people who aspire to promotion have to work diligently and methodically for long periods on their own.
- 11. They acquire desirable personal qualities such as initiative, tenacity of purpose and enterprise by studying on their own.

DISADVANTAGES OF CORRESPONDENCE TUITION

There are a few disadvantages, some of which are largely overcome during the block courses that accompany correspondence courses we offer to apprentices.

These disadvantages as we see them are:

- 1. Little opportunity for student and tutor to meet only a written rapport can result.
- 2. No competitive spirit among students.
- 3. Some students find it a real problem to budget their own time so as to give sufficient attention to their studies.

CORRESPONDENCE TUITION IN HORTICULTURE

So far I have given a general outline of the TCI and its work. I

would like now to talk in more specific terms about the role of the TCI in the horticultural industry. In doing so I will have to mention some other topics such as the apprenticeship system and the attitude of employers towards students because these have a very profound influence on the efficiency of our teaching.

A question that is often asked is, "How can the TCI teach by correspondence a practical subject like horticulture?" We obviously cannot teach a student how to bud, sow seeds, select suitable wood for cuttings and so on. We can describe how these operations are done but it is up to the employer to give practical instruction and to ensure that the student is given the opportunity to practice them.

The function of the TCI is to complement the instruction given by the employer and the practical work done in the nursery. We give the technical background information about horticultural techniques, botany, soils, plant protection and so on that will give the student a better understanding of the work he has to do and will give the more advanced student who may be working on his own, the confidence to tackle new work.

Of the 20,000 students enrolled with the TCI, just over 650 are studying horticulture. These are made up of 170 horticultural apprentices, 150 studying for the National Diploma in Horticulture, 50 greenkeeping apprentices, and 100 studying farm forestry. The remainder are pre-entry university students and other non-examination students.

It is with the first two groups that I wish to deal in more detail.

Apprentices

All apprentices are required to study with the TCI under the terms of their apprenticeship contracts and to complete two of the three stages of the apprenticeship course written to the prescription of the trade examinations. They can, if they wish, continue with Stage III work subsequently.

The New Zealand Trades Certification Board sets the examinations; these are the First and Second Qualifying and Trade Certificate examinations. The TCI gives tuition in all subjects required for these.

The TCI is sometimes criticised for teaching horticulture, botany, soil science and plant protection to apprentices at too high a level. I would like to point out that we teach to a syllabus set by the Prescriptions Revision Committee of the Trades Certification Board on which are representatives from the trade and from parks and reserves departments of local bodies and we must teach to a level that will enable apprentices to pass the examinations set by the Trades Certification Board.

Apprentices are not required to sit any examinations. This seems to me to be one of the weaknesses of the apprenticeship system and is the cause of considerable discontent among those who have studied conscientiously and passed their Trade examinations. When they come out of their time they are on practically the same footing as those who have done the minimum amount of study with the TCI.

One of the complaints I hear most frequently from both commercial nurseries and parks and reserves departments is the shortage of good propagators and adequately trained staff in general. It seems to me that the blame for this situation lies fairly and squarely with the employers themselves. This brings me back to the apprenticeship contract. I'm afraid that some employers look upon this as a rather one-sided document; that is, the apprentice is kept to his obligations towards the employer but the employer tends to overlook his obligations towards the apprentice. It is laid down in the contract that the employer is to teach certain specified basic skills — but how many do? I hasten to add that this is not always the fault of the employer, as I will mention in a moment.

I know of apprentices who have completed their time without having sown any seeds, taken cuttings, potted plants or done other simple operations. They have spent most of their time on jobs that could well have been done by labourers. These apprentices get very discouraged. They start off full of enthusiasm and do first class work with the TCI but gradually the quality and quantity of the work falls off and by the second year they do just enough work to avoid default notices being sent to their employers. They rarely sit their second qualifying examination or carry on with third year study. Most of these apprentices are lost to the industry.

Perhaps I could mention here a point that is not often realised. Tutors frequently strike up a very close relationship with their students and can usually tell when they are not happy or are going through some sort of crisis.

I want to go back now to a point I mentioned a little earlier—the lack of adequate training. Should employers be allowed to take on apprentices if they cannot train them in all the basic skills? I am thinking of nurseries that grow a very limited range of plants or carry out a very limited range of operations. These are frequently first class nurseries in their own field but simply do not have the facilities to give an all-round training.

In cases such as these I would like to see it made obligatory for apprentices to move around to different nurseries so that they could get a training in all the basic skills. We find it extremely difficult and very disheartening to try to teach the theoretical side of operations of which the student has no practical knowledge. The student then gets discouraged because he doesn't understand the assignments.

The employer's argument against this is that he would have to train three and perhaps four apprentices during the course of three years or so. This is correct but I think it is taking a very short-sighted view. An apprentice coming out of his time with a good all-round knowledge is going to be a far better nurseryman than one who has trained in a very narrow field. He will be less likely to leave on the day his contract is up as is the case so often now.

A suggestion of considerable merit was made at a recent block course. It was that employers in an area should group together so that there could be a free exchange of apprentices within the group. They would move round the different nurseries and at busy periods say, at rose budding, all could move to that property.

The failure of some apprentices to cope with the assignments because of their low educational standard causes tutors considerable concern. With horticulture becoming more and more technical we find that, in general, only apprentices with School Certificate have no trouble with their examinations. I think employers could be far more selective and perhaps I could add here that there is still a tendency among career advisors in schools and vocational guidance officers to turn the brighter students away from horticulture.

During the course of their study with the TCI, apprentices are required to attend three block courses, each lasting a fortnight. The purpose is to reinforce the correspondence studies with lectures and demonstrations in classrooms, laboratories and in the field. We try, where possible, to give students the opportunity to do a little practical work but with the time available this is very limited. The TCI is mainly responsible for organising these courses and many of the lectures and demonstrations are given by TCI tutors.

The courses are held at diffferent venues so that apprentices can get some idea of horticulture in various parts of the country. We visit as many different kinds of commercial nurseries as we can, parks and reserves nurseries, conservatories, sports grounds, orchards, market gardens and research areas. We find that very few apprentices, especially those in their first year, have any appreciation of the scope of horticulture; their horizons are limited to the boundaries of their own particular place of work. Those in commercial nurseries have little idea of what goes on in other commercial nurseries and less of the activities and scope of parks nurseries. Apprentices in parks nurseries are hardly aware that commercial nurseries exist. Lack of general background informa-

tion such as this makes it more difficult for students to fully understand our teaching material. I think this is another example of where employers could do a great deal to stimulate the interest of apprentices by arranging visits to other nurseries and places of horticultural interest.

Perhaps I could mention here that only two of the 45 apprentices attending recent block courses for second year apprentices, knew anything about the International Plant Propagators' Society.

One of the greatest benefits of block courses is that they bring together people of similar interests from a diverse range of commercial and parks nurseries scattered throughout the country. In the formal and informal discussion periods much valuable information is exchanged and many useful contacts are made — and many lasting friendships.

NATIONAL DIPLOMA IN HORTICULTURE

I would like to mention briefly those students studying for the National Diploma in Horticulture. The NDH is the highest attainment that the practical horticulturist can receive — and I must stress the word practical. To attain an NDH, students must have at least 5 years practical experience, pass oral and practical examinations and about 20 written papers, including a thesis. Apprentices who pass their Trade Certificate examination are credited with 5 subjects towards an NDH and holders of Massey and Lincoln diplomas receive some cross credits as well.

The TCI can now offer tuition in most subjects for the options open to commercial nurserymen and parks employees. The prescriptions for the National Diplomas are expressed in very general terms so that our assignments, especially for the more advanced subjects, concentrate mainly on technical background information and general principles. In the test papers students are required to interpret this information and apply it to practical situations and so develop their initiative and ability to think clearly.

THE EMPLOYER

In this paper I have made frequent reference to employers (and I include all supervisory staff in this term). Employers tend to regard study by correspondence as a two-way thing between student and tutor. Where apprentices and NDH students are involved, correspondence teaching concerns three parties, the employer being the third.

The employer should:

1. Have a moral responsibility to take a continuing interest in his apprentices and NDH students. Most students, especially the younger ones, need reassurance from time to time to help maintain their confidence.

- 2. Try to ensure that students are not so over-loaded and over-committed with their daily work that their home studies prove difficult due to sheer fatigue.
- 3. Not expect "too much, too soon" or the "best possible" results from everyone.
- 4. Ask to see student's work this not only gives him an insight into the student's studies but ensures that the student becomes aware of employer interest always a sound policy from the human relationship angle.
- 5. Be genuinely interested in the student's study activity and in the progress he is making.

CONCLUSION

We at the TCI feel that we are making a very real contribution in the field of horticultural education. We have faith in our system and this faith is backed up by comments we receive from our students and by examination results. We realise that any system has its imperfections and ours is no exception. I consider that a number of the shortcomings of the correspondence method can be remedied by a series of complementary block courses and, as I have already indicated, we have expanded our activities considerably in this direction over recent years. But I would like to leave you with the belief in the importance of the employers of our students. These people play a most important part in encouraging the student to keep on with his study and they should endeavour to make this as easy as possible.