ABSTRACT
        A pilot study assessed the effectiveness of two
selection profiles that were designed to evaluate candidates for
admission into prevocational hairdressing and automotive mechanics
programs. The selection profile, which was developed by the Technical
and Further Education (TAFE) National Centre for Research and
Development, consisted of the following measures: tests of basic
mathematics and reading comprehension, a trainability test (a
practical test specific to the relevant trade and designed to measure
aptitude for training), a school statement on achievement and
attitudes, biographical data and a personal statement from the
applicant, and an interview. Thus, the profile measured both aptitude
and motivation. The profile was found to be satisfactory from the
standpoint of its validity, reliability, and utility. It was decided,
however, that a longitudinal study of the profile approach should be
negotiated with one or more TAFE authorities so as to gain a clearer
understanding of the profile's long-term validity and that a
cost-benefit study comparing the existing student selection system
and the profile approach be conducted. It was also recommended that
any measures developed for off- and on-the-job performance be based
on objectives derived from a thorough occupational analysis of the
job in question and should take account of the occasion and
circumstances in which the performance is expected to be
demonstrated. Copies of the mathematics, reading comprehension, and
trainability tests; the school and personal biographical statement
forms; interview schedules and rating sheets; a note on the
correlation study; and a description of the criteria for assessing
hairdressing students are appended. (MN)

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SELECTION FOR THE TRADES

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TAFE NATIONAL CENTRE FOR
RESEARCH AND DEVELOPMENT

SELECTION FOR
THE TRADES

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PAULINE MAGEEAN

ADELAIDE 1987

FOREWORD

Much of the impetus for his study came from the earlier work of one of the authors (Mageean, 1985). That study suggested the 'profile approach' to student selection in TAFE held out considerable promise as a way of improving the existing methods. It was therefore decided to conduct a pilot study which developed and tried out a profile approach to selection in prevocational trade training.

The work was shared equally between the two authors with Pauline Mageean taking responsibility for the hairdressing selection procedures and Peter Thomson looking after the procedures for the automotive students.

CONTENTS

ACKNOWLEDGEMENTS

This report was compiled with help from a variety of sources.

The development of the profile elements was greatly assisted by the co-operation we received from the staff and students at a number of TAFE colleges and high schools. In particular:

- Adelaide College of TAFE
- Box Hill College of TAFE
- Croydon Park College of TAFE
- Noarlunga College of TAFE
- O'Halloran Hill College of TAFE
- Glenunga High School
- Goodwood Boys High School
- Mitcham Girls High School
- Para Hills High School

The development and administration of the automotive trainability tests was greatly facilitated by the work of John Saunders and Geoff Wagener of Croydon Park College of TAFE and David Williamson of the Australian Automotive Industry Training Committee. John Saunders also assisted with the data analysis by running the correlations reported in Section 4.0 and providing comments on the draft manuscript.

In the case of hairdressing, we would also like to acknowledge the support and assistance made available by the trade. The following salons were generous with their time and advice:

- Arturo Taverna Hair Stylists
- Brian of Adelaide
- Feres Trabilsie Hairdressers
- Hoffmann's Hair Designers
- Maxwell Hair Design
- Michael Agar - Hair
- Peter and Robert Salons Pty Ltd
- Peter Coker Hairstylist
- Ralph Votino
- Shergis Salons Pty Ltd

1.0 INTRODUCTION TO SELECTION IN TAFE

In 1985 the TAFE National Centre began the development of a number of measures that were reported in the literature as being useful in the selection of students into trade courses.

The work was carried out as a pilot study in the belief that, should the outcome prove promising, it would provide the basis for a new program to begin in 1987.

The pilot study focussed on selection into two pre-vocational trade courses in South Australia. These were the predominantly female trade of Hairdressing and the predominantly male trade of Automotive Mechanics. This report evaluates the effectiveness of the measures that were developed.

1.1 Selection profiles

The TAFE National Centre's profile of measures consisted of:

. a test of basic mathematics;
. a test of reading comprehension;
. a trainability test (a practical test specific to the relevant trade and designed to measure aptitude for training);
. a school statement on achievement and attitudes;
. biographical data and a personal statement (from the applicant);
. an interview.

Each element in the profile was designed around the requirements of the course and the trade.

By considering a range of characteristics or profile it is possible to gain a comprehensive picture of what a student can or cannot do, and likes or does not like. As pointed out by Mageean (1985) in her review of selection procedures for the trades, the profile approach has merit in that:

> Applicants can be described in a variety of ways, and weaknesses in one area can be compensated for by strengths in another. Thus, students will have different strengths and weaknesses, and these can later be matched to the requirements of different employers (p.63).

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The idea of student profiles has been around for a long time. They have developed from attempts to provide more information about students than has been available through the traditional examination system.

The need for more information about students has been a continuing plea of selection panels and employers. Indeed, everyone involved in the transition from school to TAFE and TAFE to work can benefit from more information; and profiles are one way of providing that information.

Although profiles are being used more and more it is important to note that their effectiveness still remains poorly researched. Two United Kingdom publications (Further Education Unit 1982 & 1984) cover a wide range of issues related to the state of the art of profile development and give details of their strengths and weaknesses. Among the research evidence still being sought is an answer to the question 'How valid are profiles'?

While they are basically very supportive of profiles, the Further Education Unit publications do point out that the subjective nature of the reporting of the attitudes and other personal qualities of individuals remains a problem. There are also questions about the level of acceptance that profile reports have among the wider community. Nevertheless the 'profile movement' in the UK has got up a considerable head of steam. Broadfoot (1986) reports that there is now an agreed national profile record for Wales and she believes that for the whole country it '. . . seems likely that most secondary schools will be adopting some kind of profile certificate for 16+ school-leavers over the next few years' (p.65). However, she too has reservations about whether profiles are meeting the claims made for them and calls for more research to clarify the situation. One aim of this report is to shed a little more light on these issues from the perspective of education and training for the trades in Australia.

1.2 Selection for pre-vocational courses

The Automotive and Hairdressing courses were chosen for the study. A major reason for choosing these was that in each case there are many more applicants than there are training places. The need for fair and valid selection procedures was therefore seen to have a high priority.

One aim of pre-vocational courses is that students at the end of the course will be suitable for employment in the relevant trade area. 'Suitable' as used here is defined as students being immediately useful to their employers. In other words, they have achieved around the same skill level as a young person who has completed a first year apprenticeship and with the same potential to develop into a competent tradesperson. However, as the successful applicants would have had a thirty-six week course to prepare them, they were not expected to be immediately. employable before they started the course.

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Nevertheless, before beginning a pre-vocational course it is essential
that students already possess certain skills, as these would be assumed in
the course. For example, students need to be able to read and understand
their text books. Also motivation and some aptitude for the trade are
necessary.

The profile of selection measures was designed to assess these elements
using a number of different methods. A consideration of a range of
measures enables selectors to look at the candidate as a whole in order to
reach a decision about the candidate's suitability for the course, and
perhaps, if the evidence warrants it, to suggest another more appropriate
course.

1.3   Questions of validity: the hidden agenda

While the stated aim of the project was to evaluate the effectiveness of
the various measures, we began the work with one or two preconceptions,
even prejudices. Foremost among these was our view that there was
considerable room for improvement in the existing procedures. (This view
was reinforced by virtually everyone involved in selection with whom we
spoke during the course of our investigation.) It would seem that little
has changed since 1983 when Hawke and Sweet, in discussing the selection
procedures of the various TAFE authorities, wrote:

> In the main, the procedures have been developed with little or
> no understanding of appropriate strategies or instruments
> (p.21).

The central problem for us was determining just how valid the various
measures were. Here we found ourselves at odds with some other writers on
the subject who give more stress to issues such as test reliability and
utility. So, before proceeding to a closer look at the elements of our
selection profile we will discuss the relationship between validity,
reliability and utility in order that the reader appreciates our bias in
what is to follow.

1.3.1   Validity versus reliability

Validity is concerned with how well a measurement instrument (test,
interview schedule, and so on) meets its stated purposes whereas
reliability is concerned with the consistency of the actual instrument
(For example, does a test produce the same results on repeated
administrations).

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The stated purposes of an instrument can vary, but the ability to predict performance at some time in the future (predictive validity) is a commonly stated purpose or objective of selection instruments. To say a particular test is 'valid' can be misleading. Tests cannot be termed valid by themselves—they have to be valid *for* something such as, 'a valid test of reading comprehension' or 'a valid test of knowledge about legislation in the building industry'.

Furthermore, a single test can be valid in a number of ways. Consider, for example, a maths test used as a screening test of applicants for places in a course. The same test could also be used to decide whether participants already in a course need some remedial assistance in mathematics. The one test therefore has two quite different validities depending on how it is used.

While it is always important for a measurement instrument to be valid, the relationship between validity and reliability needs to be addressed because it is possible to have a highly reliable instrument which is invalid.

For example, a mathematics test consisting of items which require the addition of two numbers, each consisting of two digits, such as

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   23        51        73            91
  +42       +29       +86  .....    +19
   --        --        --            --
```

would likely prove to be highly reliable when used with students taking a subject such as Trade Mathematics. However, if the students taking the test were not taught addition of two digit numbers or would never use this computational skill in their trade, then the test has little or no validity for them.

Too much of what we observed in existing trade testing practices had dubious validity.

1.3.2 Utility

Measurement instruments are sometimes lauded for their utility, which is another way of saying they are cheap to administer. There is no doubt that some of the popularity of paper and pencil tests resides in their economy of use. For example, a confidential multiple choice test with a separate answer sheet can be reused many times, scored quickly and subjected to elaborate analyses with the aid of one of the many computer packages that are on the market.

Too often we felt that an instrument was being used for reasons of utility with scant regard for validity.

1.3.3 Pre-requisites of validity

Although we discovered no unambiguous answers on how to improve things, we found ourselves in agreement with the conclusion reached by Nuttall (1986) that the features of measurement instruments which need to be taken into account to ensure validity are that:

. the tasks are concrete and within the experience of the individual;
. the tasks are presented clearly;
. the tasks are perceived as relevant to the current concerns of the student;
. the conditions are not unduly threatening, (something that is helped by a good relationship between tester and student) (p.33).

2.0 THE ELEMENTS OF THE CENTRE'S SELECTION PROFILE

The decisions about what elements to include in a selection profile for prevocational courses were largely dictated by the literature.

Mageean's work cited earlier had reviewed the range of approaches adopted, namely:

- achievement tests,
- aptitude tests,
- practical tests,
- school assessments,
- biographical data,
- interviews.

This guided us in our own selection of elements of a profile that were deserving of further investigation. We chose five elements and the reasons for our choices will now be discussed in turn.

2.1 Achievement tests in mathematics and reading comprehension

One of the few great truths in educational testing is that past achievement in a subject is one of the best predictors of future achievement in that subject. Furthermore it seemed that for at least one of our courses—automotive—achievement in mathematics would be highly relevant. The literature also told us that mathematics achievement was a well-respected selection tool.

Hill (1983) wrote 'There is ample evidence of apprentice performance, in technical college and in industry, being positively correlated with school Maths, and the Basic Maths student has problems in most trades' (p.1). He recommended 'that the minimum standard for entry to any pre-apprentice scheme should be Year 10 with at least Elementary Maths' (p.4).

Taylor (1983) found that performance in NSW automotive trade courses was related to school grades in mathematics. He also found that a maths test devised to identify students in need of remedial help with mathematics was a good predictor of course performance.

Holdgate (1983) found that school results in mathematics had a reasonable predictive validity for NSW TAFE trade courses. Hawke (1976) identified a mathematics test used for selection into the electrical trades that was highly efficient at identifying students with a low probability of success but less useful when it came to predicting how well the selected students would perform. On another less encouraging note, Hayes and O'Sullivan (1984) found mathematics performance did not correlate well with performance in practical work for fitting and machining students and had a small though significant correlation with the practical work of electrical trade apprentices in Victoria.

A mathematics reading test and a mathematics achievement test were found by Hannon and Learmont (1982) to be the best predictors of performance of first year apprentices at Swinburne College of TAFE, Victoria. The correlations (r = 0.34 and 0.33 respectively) were superior to the other tests they used. (It should be acknowledged that, despite being the best, such correlations are still not very encouraging.)

Overall, the indications were that mathematics achievement showed promise as a predictor of performance in work which related to theory but not practice.

It was therefore decided to include a mathematics test in the Centre's profile battery.

The mathematics story is repeated, although somewhat less positively, with 'English' tests. The work of Holdgate, Hawke, Hayes and O'Sullivan, and Hannon and Learmont cited above shows these tests have a fairly close parallel with the mathematics test results. The most commonly used English test in these studies was reading comprehension, so it was decided to also include such a test in our profile battery.

2.2 Trainability tests

A trainability test is a practical test designed to measure aptitude for learning practical skills and for engaging in further t.aining. In outline, the test involves:

. a standardised form of instruction and demonstration, used by an instructor who teaches the applicants the task (during the teaching, the applicants are free to ask questions);
. performing of the task by the applicants (no questions or assistance are allowed);
. recording of the applicants' performance by noting errors on a standardised hecklist.

Robertson and Downs (1979) identified the criteria that trainability tests should satisfy. They believed that these tests should:

. be based on crucial elements of the job;
. use only such skill and knowledge as can be imparted during the learning period;
. be sufficiently complex to allow a range of observable errors to be made;
. be capable of being carried out in a reasonable amount of time (generally less than an hour).

Trainability tests provide an assessment of the ability to learn as opposed to measures of prior knowledge. The design of a trainability test is based on data gathered from 'critical incident' interviews with people who ideally have responsibility for the teaching of the skills normally required in the trade or vocation. (The development process is described in Section 3.5, p.20.)

As early as 1933, Viteles defined this approach to assessment saying '... the work sample is a direct measure of the trainability or educatability of the applicant for employment on the operations which he will be expected to perform after a suitable amount of training and experience on the job' (quoted in Craig, 1985).

Nuttall (1986) has identified a range of literature that supports the view that performance assessments and simulations such as trainability tests have higher predictive validity than paper and pencil tests. He reviews evidence which, not surprisingly, shows that the more closely the sample of behaviour assessed resembles behaviour on the job, the stronger is the basis for validity—the proviso being that 'behaviour on the job' be justified through the use of some recognised occupational analysis technique. The analysis of the job identifies specific skills which can be the basis for assessment. Asher and Sciarrino (1974) and Robertson and Downs (1979) refer to this as the point-to-point correspondence between the criterion and the assessment.

Since the 1960s, trainability tests have been extensively developed in Britain, particularly by Sylvia Downs. They have also been developed in the USA, where they are known as Miniature Training and Evaluation Tests.

Gordon and Cohen (1973), found that early performance in the laboratory is generally an excellent predictor of final performance. Furthermore, the greater the number of tasks included in the test, the better the prediction will become. They believed it was possible to identify those trainees who will take longer than average to complete a course by simply examining their performance on the first few tasks. They also noted the non-discriminatory content of trainability tests:

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By relying upon training behavior as the trainability predictor,
no slurs can be made about restricted training opportunities for
members of minority groups . . . due to unfair discrimination by
the device employed to select trainees. Whereas aptitude tests
may be sensitive to differences in cultural background but
uncorrelated with the outcomes of job behavior, there is an
obvious 'manifest relationship' between the content of the
behavior sample predictor and the content of the job to be
learned (p.271).

Robertson and Downs (1979) suggest that the high content validity and face
validity of trainability tests may mean that applicants' performances are
more influenced by interest and motivational factors, and thus more
accurately indicate their potential for the job. This type of test
enables the applicants to get a clearer insight into the type of work they
will be doing and of their own suitability for it.

Very little has been done in this area in Australia. Davenport (1983)
reviewed the available Australian research relative to pre-apprenticeship
course performance. He found the prediction of practical skill to be an
intractable problem, very likely due largely to the unreliability of its
assessment. The tests he surveyed were more related to past learning than
to future performance.

It was decided to attempt to redress this situation by developing
Australian trainability tests for our profile.

2.3 School statement on achievement and attitudes

In the earlier section on achievement tests we noted that Hill (1983) and
Holdgate (1983) had both reported favourably on the predictive validity of
school results. This is hardly surprising since for most students the
school provides a place for continuing close contact between themselves
and a number of trained teachers over a period of three or more years.
Indeed, what is surprising is that more use is not made of the rich and
diverse information that is available from the school. The basic problem
seems to be a lack of confidence in the validity of school information.
There is also concern in some quarters that students who do not conform to
school 'norms' of behaviour would be handicapped by an unfavourable report
whereas such behaviour would not be seen as exceptional (or might not even
occur) in TAFE or the workplace.

In a Victorian study, Wilson (1979) found that employers believed that they had a right to expect schools to provide them with information about ex-pupils who were job applicants. However, in general, employers found existing school reports were of limited help as they did not know the new subjects involved, and the variety of reporting procedures between schools made meaningful comparisons very difficult. Most employers felt that information about applicants' personal qualities would be very useful. This could include such qualities as attitude to work, ability to communicate, dependability and so on. Wilson found that the majority of teachers considered that information about character and personal details should be provided 'within reason'.

Almost all ex-students considered employers had a legitimate right to expect schools to supply information for selection. Some ex-students insisted that the applicant's permission should be obtained first. However, most did not favour specific comments concerning attitudes or behaviour at school.

Hill (1983) found school maths results a better predictor of TAFE performance in pre-apprenticeship courses than the maths tests used for selection into these courses in WA. He urged that emphasis be given to school reports and '... the mass of other information which should be taken into account' (p.4).

Williams and Priest (1978, p.8) in a study of WA employers found '... some lack of employer confidence in school references and reports, and doubts about comparability of standards among schools'. However, they found that employers regarded some personal qualities as very important, these were:

> a sense of responsibility; respect for authority; loyalty to the employer; punctuality; diligence; the ability to work with and be considerate of others; initiative; and the ability to work without supervision (p.9).

Suggestions made by employers for improvement in school reports included:

. the provision in school reports of more details of personal qualities other than academic performance
. standardisation of assessment amongst schools
. better explanations of current methods of assessment and reporting (p.11).

They suggest that, as well as the present school reports which are designed for the information of parents and students, there could be a need to develop a different type of report providing information required for employment.

Sixty per cent of small business sector employers surveyed by Malone and Sumner (1984) felt that school reports were of assistance in selecting applicants for apprenticeship. Of these, nearly three quarters found teachers' comments to be of positive value in selection.

Baumgart (1985, p.32) wrote '... one wonders whether students might not be better served if there was a standardized pro forma which incorporated school reports and records with system certificates'. Later in the same report he says 'Surveys of employers and other users of profile reports in England ... suggest that, apart from some concern about uniformity of standards, there is a high degree of acceptability for forms of reporting which convey a broader spectrum of information' (p.33).

The Department of Education and Youth Affairs (DEYA) (1984) paper entitled University Entrance Requirements discusses the limitations of school certificates, and states that a record of a once-only assessment cannot '... serve the legitimate purposes of employers, and some educational institutions other than universities. These considerations have given rise to the idea of a clear accessible profile of a student's achievement' (p.9). On the same page it states:

> The main justification for considering personal characteristics
> is ... many vocations require attributes other than
> intellectual accomplishment.

Given the above views it was decided to develop a form which sought two kinds of information from the school:

. a statement of academic achievement in the different school subjects and
. a statement of personal qualities and capabilities.

(A copy of this form is provided as part of Appendix I, page 62.)

2.4 Biographical data and personal statement of the applicant

'Did you ever build a model airplane that flew'? was found to be almost as good a predictor of success in flight training during World War II as the entire US Air Force Test Battery (quoted in Asher, 1972). Asher has reviewed a considerable amount of research which shows that biographical items tend to be more highly correlated with job proficiency than any other type of testing.

Biographical data usually includes such items as:

. age,
. sex,
. ethnicity,
. employment history,
. personal achievements.

(Some of these data are collected solely for statistical purposes to satisfy the needs of the bureaucracy.)

Willingham and Breland (1982) in their review of this type of data report a variety of views concerning its acceptability. They caution against excessively personal questions and see acceptability as related to the kind of information gathered and its intended use.

In a special type of biographical question, Taylor and McNamara (1982) gave electronics apprentices a list of problems that could arise during their course and asked them to indicate if they expected them to occur. Their responses were correlated with their later performance in the course. Students who anticipated trouble with particular subjects did significantly worse in the theory section, while those who expected problems with language did significantly worse in practical work. Taylor (1983) also found that students who anticipated problems were less likely to be successful in the course.

This suggests that trade students are capable of considerable insight into future problems. However the use of questions about problems that students anticipated is open to question. If used as part of the selection procedure such questions are unlikely to be answered honestly once the students learn their purpose.

A personal statement is frequently a component of admission procedures with the applicant being asked to write about interests, goals and whatever else might be of interest to a selection panel. In a sense the personal statement is biographical data in an essay format.

Personal statements give the applicant the opportunity to reflect upon his or her reasons for wishing to enter a particular course, away from the stress of a test or interview.

Wellingham and Breland (1982) note the general acceptability of personal statements but warn of the 'sheer drudgery' that is part of the reading task if they are to be dealt with in a systematic way.

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In addition to biographical data and a personal statement about the applicants, we saw there would be value in providing a short description of the trade training that would be involved. This was to enable the applicants to have a realistic idea of what to expect if their application was successful. It was assumed applicants would consider this while writing the personal statement, and thus make a better assessment of their own suitability for the trade.

It was therefore decided to develop a form which provided a statement about training in the trade, including some of the more demanding aspects of working in the particular field, as well as asking for biographical details and a personal statement.

(An example of this form is provided as part of Appendix I, page 67.)

2.5 Interviews

Interviews are paradoxically the most used and the most criticized of selection instruments in the technical and vocational area.

The two most consistent findings from an investigation by the WA Counselling Service, (Moffatt, 1981) were that:

. the selection interview tends to have low reliability—ratings and rankings of the same applicant vary widely between different interviewers, who may have quite divergent ideas as to the critical considerations in selection;
. its validity tends to be low—it is not as efficient in predicting job performance as is frequently assumed (p.1).

In NSW the Department of TAFE has become so disenchanted with interviews that it no longer uses them when selecting prevocational students.

Despite such criticisms and actions, and despite the development of other tools and techniques of appraisal or prediction, the interview remains the most widely used selection device in business and industry. There is a natural desire on the part of the selectors to establish personal contact with applicants and make face-to-face assessments of them. Few managers are willing to employ people, particularly for responsible positions, without first interviewing them in an attempt to uncover information not disclosed by the application form or any test that may have been used. In addition, the interview may provide a useful opportunity for the applicant to learn about the organisation and the job.

Moffatt explains that the first problem, low reliability, can be overcome to a large extent by training interviewers to use a standardised interview. Validity can be increased by ensuring that selectors have as much knowledge as possible about the position for which the selection is being made.

Williams and Priest (1978) found private employers used the personal interview as their main method of selection among school leaver applicants. Of the 219 WA employers surveyed, 42.5% used an interview only. Private employers were significantly more likely to rely solely on the interview than were government employers.

> Factors considered by employers when interviewing applicants
> include appearance (dress, cleanliness, neatness) and manner
> (the general impression created including aspects such as
> confidence, stability, common sense and maturity) (p.9).

Willingham and Breland (1982) in reviewing the acceptability of interviews note that, despite their costs and dubious validity, they are viewed as a necessary selection component to enable the parties to communicate fully and put their best foot forward.

A structured interview schedule designed to overcome some of the worst deficiencies in the procedure was therefore included in our profile.

(A copy is provided as part of Appendix I, page 73.)

2.6   An overview of new directions relevant to profile development

In arriving at the decisions about what elements should be included in our profile we were repeatedly encouraged by evidence of an interest in doing things in a different way. There appears to be a new mood abroad in the 'assessment industry'. The last few years have seen a challenging of many of the cherished beliefs of test developers. Glass (1978) has raised serious questions about the ways standards are set in criterion-referenced tests. Messick (1984) has shown how little account test developers take of many important factors that influence performance, and Wood (1986) has drawn attention to the uneasy relationship between psychological and educational testing, including the questioning of whether or not psychometrics has a role in educational testing. The challenges to convential thinking are coming thick and fast.

It is issues such as the above that have raised some fundamental questions about the way we currently make our assessments. Particularly under challenge are the paper-and-pencil tests. These are especially condemned for their artificiality and remoteness from the real world of any normal occupation (Nuttall, 1986).

The artificiality and irrelevance of paper-and-pencil tests is nowhere
more significant than in selection for the trades. And it is to this area
that many are now turning for guidance. There is a growing literature to
show that performance tests such as trainability tests have a higher
predictive validity than paper and pencil tests (Ghiselli, 1966; Asher and
Sciarrino, 1974; Schmidt et al, 1977; Robertson and Downs, 1979;
Priestley, 1982; Spencer, 1983; Nuttall, 1986).

Although the development of a theory to explain the observations has
received relatively little attention, there seems to be general acceptance
of the explanation of Asher and Sciarrino (1974) that the predictive power
of performance tests lies in the close correspondence between the test and
the on-the-job task. They express this as a 'point-to-point theory'
stating that the more poii ,s in common between the predictor (test items)
and criterion space (job tasks), the higher the validity coefficient.

The increasing interest in performance assessment has resulted in greater
attention being given to the analysis of jobs so that the individual tasks
that make up the job can be described with greater accuracy. One
consequence of this has been the drawing of a distinction between
competence (the basic ability to perform) and performance (the
demonstration of the competence on a particular occasion or under
particular circumstances). Messick (1984) has shown performance can be
highly variable because of this dependence on particular occasions and
circumstances. The way the task is presented, the person who is the
presenter and the perceived significance of the task to student, can all
have a major effect on performance.

It has therefore been argued (Nuttall, 1986) that the way to improve
validity is to define more accurately the conditions under which
performance must occur and accordingly to design tests which match these
conditions.

For example, an apprentice mechanic is expected to service a car in a
certain time. The time constraint might not be conducive to providing the
'best' service, but this is not the point; the time condition exists and
must be met even if the performance is less that ideal. Assessment of the
apprentice's performance on the service task must take this fact into
consideration.

Greater attention to the occasion and circumstances under which
performance on the job will be judged must inevitably produce significant
changes in the way we go about selecting students. In preparing selection
profiles these developments need to be taken into account, this is
something we attempted to do when devising our profile.

3.0 DEVELOPMENT OF THE INDIVIDUAL MEASURES

The previous section has outlined the reasons for choosing the particular elements of the selection profile. In this section we detail the methods used to construct the various instruments.

3.1 General principles

In preparing or instruments we endeavoured to take into account the first three aspects c velopment process identified in the introduction (p.5). That is, evey attempt was made to ensure that the tasks were:

. concrete and within the experience of the individual
. presented clearly
. perceived as relevant to the current concerns of the student.

Among the consequences of this approach was the fact that two distinct profiles emerged. The requirement that the measures be relevant to the current concerns of the students meant there were considerable differences between the profile developed for the Automotive pre-vocational course and that developed for the Hairdressing course.

3.2 Preliminary work

At the outset of the project, interviews were held with members of industry, both employers and tradespeople, representatives of employers' organisations, apprentices, lecturers involved in the relevant pre-vocational courses and past and present students of the courses, to establish the criteria that were seen to be important for entry to the courses. Selection measures used for pre-vocational and pre-apprenticeship courses across Australia were studied, as were the selection methods used by a cross-section of employers in the relevant industries.

Texts used in the courses, and manuals used on the job were analysed to ascertain the levels of English and mathematics required. It was found that young people doing the courses should be able to read at Year 10 level in order to use their text books effectively.

Additional background was also obtained from a reading of the literature referred to in the previous two sections. Altogether these preliminary activities provided the basis for the development work. The preparation of the individual instruments will now be described in greater detail.

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3.3 Mathematics achievement test

The mathematics test covered the content areas of Money, Area, Clock Time, Calendar Time, Measurement, Estimation, Graphs and Tables, Average, Percentages, Ratios and Proportions.

The objectives of the items were to test the ability of the students to:

. carry out the four processes (+, -, x, ÷) with money calculations in practical (everyday) situations which involve decimals;

. carry out the four processes with area calculations using units in square mm and square m, in practical situations and involving whole numbers and fractions;

 read the time using both 12 hour clocks and 24 hour digital displays and to perform basic arithmetic operations (+, -, x, ÷) with time;

. use a calendar to calculate elapsed days and weeks;

. measure length and to carry out simple calculations of length involving the four processes in practical situations involving whole numbers and fractions;

. estimate common measurements of length, area, angle and volume;

. read and interpret trends from simple graphs and tables;

. interpret and use the word 'average' in the correct context;

. use percentages, ratios and proportions in simple calculations.

Three very similar versions of a mathematics test were constructed using examples testing the above objectives and set at approximately Year 10 level. Each test was trialled on a separate. but similar group of 120 school students who had completed Year 10 and were considering entering a trade.

Item analysis was carried out as described in Thomson (1986) for determining item difficulty and discrimination (Phi coefficient).

A collection of 38 questions was then compiled which:

. covered all the objectives identified above;
. ranged in difficulty from relatively easy to hard;
. discriminated positively ($\phi > 0.3$).

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(A copy of this final test is presented as part of Appendix I, page 41.)

3.4 Reading comprehension test

Initially two tests of reading comprehension were developed, one using a modified Cloze procedure and the other a conventional four alternative multiple choice format with the questions testing the comprehension of a passage of reading.

The attempt to develop the modified Cloze test (in which the individual items had 4 alternative answers) was unsuccessful. The difficulties seemed mainly associated with the unusual method of presentation which complicated the reading task, that is, we failed to meet the second of the criteria we set ourselves in Section 3.1. Although we intend to overcome the problems, this is a task for the future and no further reference will be made to the Cloze test in this report.

Reading comprehension was therefore measured by a passage reading test. The questions were directed at the level of understanding at which the student knows what is being communicated and can use this knowledge in one of the following three ways:

- translation—in which the student has the ability to put the message or concept into different words;
- interpretation—in which the student can identify relationships between parts of the passage and can comprehend the major ideas;
- extrapolation—in which the student can go beyond the literal passage to make inferences and predict trends.

Two forms of a reading comprehension test were developed to test the above elements of comprehension with the additional criteria that:

- the content would be of interest and relevant to the type of students entering prevocational courses;
- the reading level would be about Year 10 (and technical jargon would be avoided);
- non-sexist language would be used.

Trial testing and item analyses were carried out in the same way as described for the mathematics test and a single form of 17 items (consisting of two reading passages) was selected.

(A copy of this test is provided as part of Appendix I, page 47.)

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3.5 Trainability test

Trainability test development was a variation of the procedures set down by the British Industrial Training Research Unit (1981). Four separate stages were involved as follows:

a) Analyses of mistakes made by trainees

Employers, instructors and supervisors from the two trades, automotive and hairdressing were asked to describe the type of mistakes that beginning trainees (who later proved to be among the less able performers) made in the respective trades. The technique for obtaining this information involved identifying 'critical incidents'—occasions in the past when trainees had begun to show they were having difficulties mastering a skill. A checklist of these mistakes was then produced.

b) Selection of task

With the help of instructors and supervisors a number of on-the-job tasks were identified in which applicants could reasonably be expected to make some of the errors identified as 'critical incidents' as described above. For automotive the two tasks chosen were:

  . fitting a trailer light assembly
  . assembling a compound linkage.

In the case of hairdressing the tasks were

  . a simulated interaction with a client
  . sectioning of hair, placing rollers and b! w drying.

c) Scripting the test

Each task involved a sequence of operations and these were written down for the instructor to follow. However the procedures varied between automotive and hairdressing.

The Automotive Script

Sets of parts were provided along with diagrams of the completed assemblies.

The script (followed by the instructor) gave the order in which the assemblies were carried out.

A separate error checklist was developed which listed mistakes that students could make when they carried out the task.

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The scripting was done for two videotapes, one on client interaction and the other on the techniques of sectioning, placing rollers and blow drying hair. The first of these was a role-play video designed to serve two purposes:

> First it shows typical activities during a pre-vocational hairdressing course and stresses that hairdressing is a physically demanding trade. Students are shown attending to elderly clients and cleaning work areas. Migrant course members, and both males and females are shown. Then the video shows a student 'dealing' with a client first rudely then correctly.

> The applicant is then required to play the role of the young hairdresser who is arranging an appointment for a client who has telephoned, when a client comes into the salon. The applicant must copy the type of positive behaviour demonstrated in the video to deal with this situation.

> This procedure provides an opportunity to evaluate the applicants' manner in a replica of a professional situation. In rating the performance allowance is made for nervousness and self-consciousness.

Naturally there is no one particular personality type which is the only one which can become a successful hairdresser. Different salons have different styles and cater for different clienteles so considerable variety among hairdressers' personalities is essential. However, there are some characteristics which are very important if applicants are to become successful hairdressers: they must be warm and friendly even under stress, and able to make clients feel they are valued customers. They must be sensitive to the clients' needs and wishes. They need tact, and must be interested in what the client says without being intrusive or too familiar. They must be good, discrete listeners, courteous and considerate. They need commonsense and decisiveness.

These points were incorporated into a checklist which posed a series of questions about the students' behaviour as listed below.

Was the student:

- courteous, treating the client in a pleasant way?
- moving and acting smoothly and efficiently, not awkward or clumsy?
- quick witted - understanding and responding quickly, not just standing around?
- warm, looking client in the eye, smiling, not aloof or too distant?

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. sensitive towards others, adapting to the client's needs, not telling
   the client what he or she 'wants'?
. moving things quickly, neatly and tidily?
. showing some initiative, willing to try?

Separate error checklists were developed for use in conjunction with the
showing of the videotapes.

d) Taking and scoring the test

The instruction was given in a standardised way following a script (in the
case of hairdressing a videotape was used). The students were encouraged
to ask questions if they were unsure of anything.

The students then carried out the task without help from the instructor.
They were allowed as much time as necessary to complete the task, and the
instructor did not intervene unless the students were about to endanger
themselves or damage machinery. During this period the instructor marked
down any errors made on a standardised error checklist.

A copy of one of the automotive trainability tests is provided as part of
Appendix I (page 54). It should be noted that trainability tests conform
in a special way with the first of the general principles of instrument
development we identified on p.17. The first principle was that the task
be 'concrete and within the experience of the individual'. This is true
of trainability testing even though the experience was gained only moments
before the testing begins.

**3.6 Instrument for obtaining school statement on achievement and
       attitudes**

The schools which the students had attended in the previous year were
approached with a request for two assessments as follows:

. an assessment of student mastery of academic achievement in the
   school subjects taken in the last year;
. an assessment of a number of personal qualities that had previously
   been identified as important by employers; namely:

        - co-operation with peers,
        - co-operation with those in authority,
        - reliability,
        - written communication,
        - spoken communication,
        - self-reliance,
        - self-awareness,
        - perseverance,
        - resourcefulness,
        - effort.

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In both cases schools were asked to rate the students on a 4 point scale from OUTSTANDING to BELOW BORDERLINE.

It was assumed that most of the schools contacted would have at least one teacher who had taught the student in the previous year and would therefore be in a good position to make these assessments. Written permission was obtained from the applicants before a school was approached. Of the 34 schools approached only 2 failed to provide the assessments.

(Full details of the school statement are provided as part of Appendix I, page 62.)

3.7 Instrument for obtaining biographical data and personal statement

The relevant biographical data sought was:

- name and address;
- telephone number;
- sex;
- age;
- current employment;
- employment over previous 12 months;
- health;
- hobbies and interests.

At the conclusion of the section on biographical data the students were asked to write a personal statement on why they wanted to do the course.

At the beginning of the instrument a brief outline of what it is like to work in the trade was given as previously described on page 14.

(A copy of the instrument used with the hairdressing group is provided as part of Appendix I, page 67.)

3.8 Interview schedule

The interview schedule was developed for the hairdressing group only as both teachers and employers had stressed the importance of interviews for selecting hairdressers.

The schedule was developed to meet the following objectives:

- to help in the selection of the most suitable students for the course and trade.

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('Suitable' is defined here as those who would be able to cope
with the demands of the course and trade, who would find the
work suits their interests and personality and who at the end of
the course, would be acceptable to industry.)

. to provide applicants with information about the course and to
  discuss any queries or uncertainties they might have.

. to provide an element of self-selection by encouraging applicants to
  evaluate their own abilities, interests and motivation to do the
  course and to work in the industry.

(Obviously unsuitable applicants should be assisted to realise
this for themselves and be given information about remedial,
bridging or alternative courses.)

During the interview the interviewer observed:

. How the applicant behaved during the interview (allowing for
  nervousness) - were warmth and courtesy shown?

. Did the interviewee appear overconfident or too tentative?

. Did the applicant listen carefully?

. Did his or her responses to questions show sensible judgement?

. Was the interviewee able to explain things clearly?

. Did the applicant have a clear and pleasant way of speaking?

After the interview, time was provided for the interviewer to complete a
rating scale for each applicant on:

. evidence of real interest in hairdressing
. personal presentation
. personality (potential for establishing good rapport with clients).

(This rating scale is provided with the interview schedule as part of
Appendix I, page 73.)

4.0 EFFECTIVENESS OF THE MEASURES

At best there is only a partial picture of effectiveness to be obtained
from a study of this sort. The information presently available dictates
that any conclusions about effectiveness can be related only to
performance on the course. We have no way of knowing if the instruments
are useful in selecting good performers on the job. This would need to be
the subject of some future study as our students did not have jobs when
they were participating in the project.

To some degree our evaluation of effectiveness began with our readings
about the work of colleagues in other places. We have used our review of
the literature to identify five selection procedures that a variety of
experts have demonstrated as being effective under certain conditions.

The instruments we have developed are now available for others to try
because only after multiple trials involving a large number of individuals
can the validity of the measures be accurately determined.

We have already indicated that this was a pilot project aimed at taking an
exploratory look at the value of selection profiles for TAFE. There are
some statistics to report, but before doing this it is important to
identify the constraints under which the statistics were obtained.

To begin with we had no control over the way the TAFE colleges carried out
their assessment procedures. The main statistical test we have applied is
that of correlating the results on our measures with the end-of-year
performance in the two prevocational courses, that is, a test of
predictive validity. While the colleges have been extremely cooperative
in providing the results they have not always been in a form which we have
been able to use. For example, one of the two hairdressing schools
assessed their students' practical work on a three point scale, credit,
pass and fail. However, as no student failed we were left with only a two
point scale and therefore decided against including this group's practical
scores in our analysis.

This same college provided a second problem in that when the students were
asked to give permission to approach their previous years' schools for a
school statement only 3 of the 27 agreed. This substantially reduced the
number of cases of school statements.

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Furthermore, both groups had already been preselected and so were relatively homogenous for some of the skills we were assessing. Knowing they were already in the course would presumably affect the students' performance on the measures, particularly the Biographical Data, Personal Statement and Interview elements. It was therefore decided to try out these measures with the hairdressing students only.

Another difficulty, specific to the automotive group, was our inability to obtain a separate score for practical work carried out over the year. Each unit which made up part of the final year automotive result had both a theory and a practical component. The guidance given to the TAFE lecturers was to allocate approximately 50% for theory and 50% for practical work on each unit. We were not able to obtain the actual breakdown of these marks.

In fact none of these constraints should be too worrying as pilot projects like this are for searching out leads, not looking for definitive answers—and we did get some good leads.

Tables 1 and 2 show the correlations obtained between the different elements of the selection profile and the results obtained by the students in the pre-vocational automotive and hairdressing courses.

A discussion on correlations and their significance is provided for the more mathematically-minded readers in Appendix 2, (page 79). Suffice it to say only a limited amount of information can be gained from the tables. They provide us with some leads but nothing more. None of the relationships are 'strong' in the statistical sense so we are unable to say that such and such a measure is a good predictor of performance in a pre-vocational course.

Nevertheless, on occasions in the sections that follow, we have taken more than a little 'test developers licence' in our use of the numbers from the correlation tables on page 27. (For example, in suggesting that the reading comprehension test is a better predictor of success than the mathematics test.) The sizes of our groups do really not allow us to be confident about the 'strength' of the relationships. It is also worth stressing that our use of numbers should not be allowed to obscure the fact that this is basically a qualitative piece of research.

An additional constraint in the following discussion is that our study did not include an investigation of the assessment procedures used in the pre-vocational courses to arrive at their final results. We do not know how valid those assessments are so looking for high correlations might well be quite pointless.

4.1 Effectiveness of mathematics achievement test

The mathematics achievement test did not meet our expectations. The results suggest it is a better predictor of performance in hairdressing where it is hardly used than in automotive where it has traditionally been seen as a most important ability.

TABLE 1
Correlations between Profile Measures and Final Results—Automotive*

	Automotive Final Report (Theory & Practical)
Maths	0.30(16)
Reading	0.72(16)
Trainability I	0.49(17)
Trainability II	0.68(18)
School Maths	0.49(11)
School English	0.74(12)
School Reliability	-0.18(11)
School Self-awareness	0.04(11)
School Resourcefulness	-0.51(11)

TABLE 2
Correlations between Profile Measures and Final Results—Hairdressing*

	Hairdressing Theory	Practical	Cosmetology	Personality
Maths	0.58(35)	0.58(35)	0.07(34)	0.47(37)
Reading	0.65(32)	0.63(32)	0.10(31)	0.29(32)
Trainability	0.37(32)	0.55(8)	0.11(31)	0.29(35)
School Maths	-0.34(9)	0.26(8)	-0.11(9)	-0.45(9)
School English	-0.35(11)	-0.01(9)	0.10(11)	-0.12(12)
School Reliability	-0.12(11)	0.66(8)	0.39(11)	0.23(12)
School Self-awareness	0.03(11)	0.62(8)	0.58(11)	0.15(12)
School Resourcefulness	0.06(11)	0.65(8)	0.43(11)	0.08(12)
Personal Statement	0.59(29)	0.52(25)	0.09(24)	0.12(27)
Interview	0.49(26)	0.10(26)	0.38(25)	0.05(26)

* Correlation-Coefficient is Pearson's r (See Appendix 2 for details), number of cases for each correlation is given in parenthesis alongside the value.

The issue of the content validity (refer page 18) of the test was raised with a number of teachers who felt that although it was testing the appropriate objectives it went 'too far'. By 'too far' they meant that since the amount of mathematics included in their prevocational courses was minimal, the test lacked content validity.

See also the discussion on school mathematics performance under 4.4.

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4.2 Effectiveness of reading comprehension test

The reading comprehension test provided encouraging results in both automotive and hairdressing. The fact that there was little difference between reading and the theory and practical elements of hairdressing is perhaps a little surprising, and that cosmetology did not give similar results to hairdressing is even more so.

4.3 Effectiveness of trainability tests

The trainability tests were the measures that generally produced the most enthusiastic responses from the teaching staff and students. Students were quick to see their relevance and comment on their superiority to the paper and pencil tests with statements like:

> This is the sort of thing I'm here to learn about not that Maths and English stuff. (Automotive prevocational student.)

The correlation study (Tables 1 and 2) is also encouraging of this form of testing suggesting (in all cases except Cosmetology) that more should be found out about the relationship.

The difference between the two trainability tests used with the Automotive students is also interesting. Trainability II was a more complex and more time-consuming task than Trainability I, and our early work with Trainability I suggested there might be a relationship with the time factor worth exploring. Although the students were not encouraged to rush the trainability tests we noted that when working in a group situation they tended to race each other to see who would finish first.

The time taken on the tasks was therefore subject to a separate investigation.

In automotive, each of the students was timed as well as scored on his performance. The correlations between time to complete task (without scoring) and final course results were 0.72 and 0.37 respectively. This effectively reverses the result obtained by scoring (see Table 1) and suggests that it might be profitable to experiment with a scoring system that introduced a time factor into the scoring equation.

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4.4 Effectiveness of school statement on achievement and attitudes

The rationale for developing a school statement form was previously outlined in Section 2.3, page 10. Despite warnings that schools would not be co-operative in this matter we managed to obtain statements from 32 of the 34 schools approached. Only one school formally protested about the additional workload involved and hinted that it might want to reassess the situation if requests for such statements became a regular practice of TAFE.

The form asked for teachers' judgments about both academic achievement and personal characteristics (see Appendix 1, page 62)). In the case of academic achievement it was decided to obtain correlations between the final results and performance in the two subjects that were common to all students, namely Mathematics and English. In the case of personal characteristics, correlations with final results were done with three items, reliability, self-awareness and resourcefulness. These are shown in Tables 1 and 2.

The results were extremely variable. They failed to bear out our contention that more should be made of 'the rich and diverse information available from the school'. While we might be on the right track with school Maths and English results for the Automotive group the exact reverse is true in the case of Hairdressing. And while school assessments of reliability, self-awareness and resourcefulness show some promise in predicting results in Hairdressing practical and Cosmetology they are without promise anywhere else.

However it would seem that we have our own version of rich and diverse information in this set of results and we should not let ourselves fall into the trap of 'throwing the baby out with the bathwater'. The results require further investigation. It may be, for example, that performance on particular parts of the school Mathematics and English programs would provide different results. Such an investigation warrants being done because of the disturbing differences between the two groups.

4.5 Effectiveness of biographical data and personal statement

The biographical data and personal statements were tried out with the Hairdressing group only.

Given that the group completing the form had already been accepted for the course and would have lacked some motivation to 'do well' the correlations between the personal statement and Hairdressing theory and practical were encouraging. (The method used to score the personal statement responses is outlined in Appendix 3, page 81.)

The biographical data was not used in any way as it was not possible to obtain any information about the applicants who had applied but were unsuccessful. It was felt that any useful study of biographical data would need that information.

4.6 Effectiveness of interview

The interview suffered from the same difficulty we had with the personal statements in that the interviewees already knew they had been successful in obtaining a place on the course. Nevertheless the correlation between the interview assessment and Hairdressing theory was sufficiently high to be encouraging.

5.0 DISCUSSION OF RESULTS AND SOME RECOMMENDATIONS

There are many factors influencing the conclusions that can be drawn from a pilot study such as the one reported here.

Not least of these is the fact that the profile measures developed had to be tried out on groups that had already been selected for their courses. The alternative, namely asking to be given the responsibility of selecting for the courses, was just not tenable at the time we started our work. The existing system of selection had its supporters and the process of gaining agreement for any radical suggestion for change would have involved protracted negotiations with several groups and consequently appeared to have only limited chances of success. The task of the developers was to find a way of demonstrating they had something which was worth taking up in a major way because it offered more than the existing system of selection.

The competing selection process being used by the SA Department of TAFE at that time involved four paper and pencil selection tests which were:

. a mathematics test (developed by the Public Service Board);
. a reading comprehension test (developed by the Public Service Board);
. the Sweet Technical Information Test (a test of technical knowledge);
. the Minnesota Paper Form Board Test (a test of deductive reasoning involving spatial abilities—belonging to the group commonly called IQ tests).

A study of these selection measures for entry into prevocational courses was carried out during 1984 (Jackson and Hamilton, 1984) for the SA Apprenticeship Review Committee.

Correlations (Pearson's r) were obtained between each of the tests and the pre-vocational course results in four trade courses involving nine groups of students. The numbers in the groups varied from 26 to 64 students. Values of Pearson's r varied from +0.84 to -0.11 but only around 12% were +0.6 or more. The authors of the study took the view that the correlations showed satisfactory positive relationships existed between the tests and the course results (p.34).

The study concluded:

> that the existing process was capable of meeting the objectives to a satisfactory degree (p.55).

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There were, however, a number of recommendations made for improvement—including the abandonment of the Sweet Technical Information Test.

Our reading of the Jackson and Hamilton report does not allow us to arrive at the same optimistic conclusions. Indeed, the correlations they report seem to indicate a similarly mixed set of results to the ones in our own small study.

Clearly some of the conflict between our positions arises because of our different starting points when evaluating tests. Our view, as put earlier, is that validity considerations should be pre-e ninent when making judgments about a test. Jackson and Hamilton give stress to matters of test reliability and utility, a position which we do not share. However, even disregarding our different standpoints, we believe there is sufficient evidence to suggest the current selection system is in need of an overhaul. Despite the overall satisfaction of its authors, the Jackson and Hamilton report contains recommendations which call for more development work, more evaluation or further study, and monitoring. A position which we fully endorse.

* * * * *

The questions raised about the acceptability of the profile approach in the first section of our report have not been fully answered by the pilot study. Instead, a whole series of supplementary questions have emerged. For example:

. why were the school results so variable between the two trades?
. why did the mathematics test perform less well than the reading comprehension test?
. what effect would varying the weighting given to the profile elements have on the selection process?

Clearly there is a field here which needs to be turned over to a greater depth. The results of the pilot study are tantalizing in that they suggest so many possibilities.

Recommendation 1

That a longitudinal study of the profile approach be negotiated with one or more TAFE Authority with a view to validating the existing measures (suitably refined) in a wider range of trades and over a period that enables consideration to be made of performance both on the course and on the job.

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Any expansion of this project into other trade areas carries with it a
cost implication. The refined profile measures should take full account
of both course and job content. This in turn implies a process of course
and job analysis which can be relatively time consuming and returns us to
the issue of utility that was raised in the introduction (p.4).

The case for measures of the trainability test type has already been made
but what was not discussed was the cost of this approach. There is no
doubt that the profile approach being advocated wil' mean more work for
those involved in selection and more costs for development and
administration. What needs to be carefully weighed up is whether these
costs can be justified.

Let us consider the hypothetical case of a training program operating
under the present selection procedures.

  . assuming there are 100 successful applicants
  . and each trainee costs the system $10 000 to train
  . the total cost is $1 000 000
  . but if 50% drop out and go elsewhere
  . the system loses $500 000.

If an alternative system of selection resulted in only 10% dropping out
then the system would be $400 000 better off (less the costs of setting up
the alternative). And once the new system had been established, the
benefits would continue to accrue over the years.

It is possibilities such as these that lead to the second recommendation.

Recommendation 2

That any use of profiles as recommended in 1 above is accompanied by a
thorough cost-benefit comparative study between the existing system and
profile selection.

                    *   *   *   *   *

This report, being written as it is at the end of a college-based course
of training, is unable to consider the validity of the profile measures in
terms of their ability to predict on-the-job performance.

This is a significant handicap since the trainability tests, in
particular, are designed to predict on-the-job rather than on-the-course
performance. Furthermore, any selection measure used in TAFE needs to
have on-the-job performance as a foremost consideration—too much TAFE
selection testing involves paper and pencil tests with virtually no
relevance to any real job situation.

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This leads us to our next recommendation:

Recommendation 3

*That trainability tests be developed for use in selection into a range of
TAFE courses and validated in terms of their ability to predict on-the-job
performance.*

*   *   *   *   *

The artificiality and irrelevance of some forms of testing has led to
increased interest in performance assessments. There is general consensus
that performance assessments and simulations such as work samples and
trainability tests have higher predictive validity than paper and pencil
tests. The reasons for this (as discussed in Section 2) are for the most
part attributable to the point-to-point correspondence between the
assessment instrument and the job skills.

The job skills need to be identified through a process of occupational
analysis. The specific tasks so identified can then be used as the
specific objectives around which the testing tasks are constructed.
Indeed, some descriptions of specific tasks read like test specifications.

The measurement of performance needs to be distinguished from that of
competence; as discussed earlier in Section 2.6. Competence refers to
what a person knows and can do under ideal circumstances. Performance
refers to what a person can do in a particular set of circumstances.

In TAFE we are more interested in performance than in competence and,
because we know how varied the circumstances of performing can be, we need
to take this into account when making assessments.

The relationship between competence and performance creates problems of
interpretation for selectors. Although it is possible to infer people
have competence when they consistently demonstrate a sk;", the reverse is
not always true. It can be that the competence is present but the
circumstances under which the person is expected to perform interfer to
prevent it being demonstrated. Factors such as anxiety, fatique, poor
working conditions, style of working and lack of motivation are among the
host of reasons that satisfactory performance is not demonstrated even
though the competence is present.

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The implications of this for measuring both on and off-the-job performance are considerable. TAFE teachers and work supervisors are interested in performance both off and on-the-job respectively but, as we have already seen, differences in the two situations can result in different performances. In fact, an apprentice set exactly the same task both on and off-the-job can fail one but pass the other because the circumstances of testing the performance are different.

Consideration therefore needs to be given to the conditions under which the performance is to be measured. We have already drawn attention to the interesting interaction between time on task and test score with the two trainability tests used by the automotive pre-vocational group (page 28) and believe further research into this relationship is warranted.

Because the various factors influencing performance are inclined to change with the changing demands of the job, the establishment of a standard set of conditions is not possible. In practice the conditions vary and therefore the standards established to measure performance should also vary.

By paying greater attention to the occasion and circumstances in which performance on the job will be judged, the validity of the assessment will be increased.

Recommendation 4

That any measures developed for off-the-job and on-the-job performance should be based on objectives derived from a thorough occupational analysis of the job in question and should take account of the occasion and circumstances in which the performance is expected to be demonstrated.

* * * * *

We have previously pointed out that we have been comparing our profile measures with criteria (exam results at end of year) that are themselves untested (p.26).

We do not know how good the tests used by the automotive and hairdressing schools were at measuring the knowledge, skills and attitudes that the two courses were aiming to deliver. What we can suspect however, is that the schools' tests would have their imperfections and could profit from a long term study that took more account of on-the-job performance criteria.

What must not be forgotten in this discussion is the fact that the major
responsibility for the valid use of a profile rests with the person who
interprets it.

Those involved in making selection decisions in TAFE have in the past
taken little account of the circumstances under which performance has been
demonstrated. We believe the profile approach with its emphasis on
providing more information about applicants is one way of making inroads
into this complex problem.

We are firmly convinced that the correct interpretation of a profile is
contingent upon a full description of each measure used and the
circumstances under which it is used. Although we believe this is a
reasonable expectation of any profile we do not underestimate the
considerable volume of work that will be required to act   e this end.

Finally, we believe that the encouragement and expressions of interest we
received from the whole range of individuals who are part of the selection
process in TAFE showed we were addressing a real need in the system.

We appreciate that selection procedures of high quality are still a long
way off but we do believe they are attainable. This study represents a
small step towards that end.

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SELECTION TESTS FOR TRADES

M A T H E M A T I C S

DIRECTIONS

This test consists of 38 questions.   Lach question is followed by four choices for an answer.

Answers are made on the separate ANSWER SHEET.   To give your answer find the row of letters - A, B, C & D which has the same number as the question you are answering.   Next, put a line in the space between the dotted lines under the letter which you have chosen.

FOR EXAMPLE:

Q 1   One job for a client cost $37.90 and another $24.05, what is the total bill for the two jobs

A $13.95   C $60.95

B $51.10   D $61.95

The correct answer to Q1 is D so you mark your ANSWER SHEET as shown ➡

Q1

A	B	C	D
::	::	::	▮▮

Make your line thick and heavy.

Correcting Mistakes

If you make a mistake and wish to change an answer simply cross out the wrong answer and put a line through your new answer.

For example, changing (A) to (D) is done as shown ➡

A	B	C	D
✗	::	::	▮▮

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD

PLEASE DO NOT MAKE ANY MARKS ON THIS BOOKLET

1   In repairing a machine the parts cost $65.00 and labour $9.50. How much altogether?

   A $55.50   C $65.50

   B $64.50   D $74.50

2   A customer uses a $12 gift ucher as part payment for a $41.50 account. How much does she have to pay?

   A $28.50   C $39.50

   B $29.50   D $53.50

3   If your hourly rate of pay is $5.50, how much for 5 hours work?

   A $25.25   C $27.25

   B $25.50   D $27.50

4   A carton of six boxes costs $12.60. How much is each box?

   A $2.10   C $6.10

   B $2.27   D $6.60

5   If the area of one room is $36m^2$ and another is $28m^2$, what is their total area?

   A $12m^2$ C $64m^2$

   B $54m^2$ D $94m^2$

6   If $600mm^2$ of rubber sheet is cut from a piece $9100mm^2$ in area as shown below, how much is left?
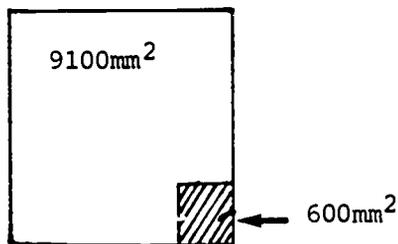
   A $9500mm^2$ C $8400mm^2$

   B $8500mm^2$ D $3100mm^2$

7   If one work area takes up an area of $3m^2$, how much area will 4 take up?

   A $1m^2$ C $12m^2$

   B $7m^2$ D $16m^2$

8   If $72m^2$ of space is divided equally into work areas for 8 people how big is each work area?

   A $9m^2$ C $64m^2$

   B $12m^2$ D $80m^2$

9   One bottle of cleaning fluid can clean $2 1/2m^2$ of surface an another can clean $3 1/4m^2$. What is the total surface the two bottles can clean?

   A $13/10m^2$ C $5 1/8m^2$

   B $3m^2$ D $5 3/4m^2$

10   If a piece of material $12 1/4m^2$ is cut from a $50m^2$ piece, how much is left?
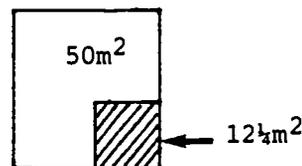
   A $37 3/4m^2$ C $38 1/4m^2$

   B $38m$ D $47 3/4m^2$

11   One bottle of stain remover can clean an area of $9m^2$. What area will two and a half bottles clean?

   A $3 3/5m^2$ C $19m$

   B $18 1/2m^2$ D $22 1/2m^2$

12 How many 1/5m² pieces of plastic can be cut from a roll of plastic with an area of 15m²?

    A 3   C 50

    B 30   D 75

13 What time is shown by this clock?

    A 6:11   C 10:33

    B 6:52   D 10:7

14 What time is it by this clock?

    A 5:45 am   C 5:45 pm

    B 7:45 am   D 7:45 pm

15 Three separate tasks take the following times:
1 minute 45 seconds
2⁻ minutes
3 minutes 15 seconds

How long will it take to do them all?

    A   30 mins C 29 mins

    B   29m 50s D 28m 50s

16 If you work a 7½ hour day, and 3 hours 50 minutes are spent dealing with clients, how much time is available for other work?

    A 3 hrs 20m   C 4 hrs 20m

    B 3 hrs 40m   D 4 hrs 40m

17 If you do a particular task in 9½ minutes, how long should you allow to do the task 8 times?

    A 13 minutes   C 72 minutes

    B 36 minutes   D 76 minutes

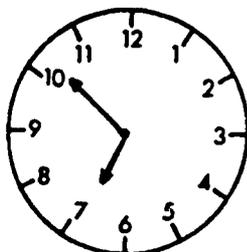18 If a job that takes 12 hours 30 minutes is divided equally among 5 people, how long will each spend on the job?

    A 2 hrs 6m   C 2 hrs 15m

    B 2 hrs 8m   D 2 hrs 30m

Questions 19 & 20 refer to the following calendar.

JANUARY

Su	M.	Tu	W.	Th	F.	S.
				1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

Su	M.	Tu	W.	Th	F.	S.
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

MARCH

Su	M.	Tu	W.	Th	F.	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

19 How many weeks are there between February 3 and March 17

    A 1   C 4

    B 3   D 5

20 According to the above calendar, if you worked Monday to Friday each week between January 20th and February 21st inclusive, and two public holidays fell in this period, how many days did you work?

    A 20   C 25

    B 23   D 27
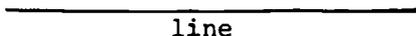
21 _____
line

What is the length of the above line? (Use the measuring gauge on the bottom of the ANSWER SHEET. Do not use any other measure.)

A   50.5mm   C   505mm

B   55.0mm   D   550mm

22 If you need three pieces of wire 4.6m, 7.2m and 10.5m, how much wire do you need altogether?

A   12.3   C   22.3

B   21.3   D   32.3

23 If 7.6m is cut from a 13.5m piece of cord, how much is left?

A   5.9m   C   20.1m

B   6.9m   D   21.1m

24 If 8 pieces of tape are needed for a job, and each is 12.2m long, how much tape is needed?

A   20.20   C   96.16

B   86.60   D   97.60

25 You have 3 metres of wire to cut into 6 equal pieces. How long will each piece be?

A   5mm   C   500mm

B   50mm   D   5000mm

26 Which one of the following is the best estimate of the length of this line?

A   4.0cm   C   8.0cm

B   6.0cm   D   12.0cm

27 Which of the shapes is approximately twice the area of the shaded square?
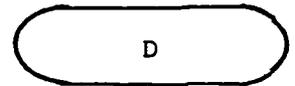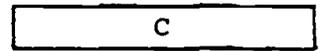
28 Which one of the following is the best estimate of the size of angle 'X'?

A   45°

B   120°

C   325°

D   360°
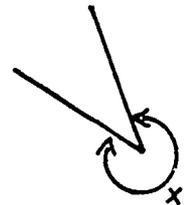
29 The amount of fluid in this 1 litre bottle is most nearly?

A   100 ml

B   300 ml

C   600 ml

D   800 ml

30 One day you deal with 9 clients, the second day with 12 clients, the third with 10 and the fourth with 13. What is the AVERAGE NUMBER of clients you dealt with over the four days?

A   9   C   13

B   11   D   44

31   A 1000ml jar is 20% full of
water. If a further 30% of
water is added, what proportion
of the jar contains water?

    A 1/10   C 1/2

    B 1/6   D 2/3

32   2 litres of cleaning fluid is
diluted by 5.5 litres of water.
What is the ratio of the cleaner
to water in the diluted fluid?

    A 2:5   C 4:7.5

    B 4:7   D 4:11

33   A solution is diluted with 1
litre of water to 2 litres of
solution. How many litres of
water would be needed to dilute
6 litres of solution?

    A 3   C 6

    B 4   D 12

34   Water and salt are mixed in the
ratio of 8 to 1 by weight to form
a brine solution. The amount of
salt to be added to 24 kilos of
water is:

    A 1 kilo   C 8 kilos

    B 3 kilos   D 24 kilos

35   A 5% commission is paid on sales.
If $250 worth of goods are sold
what is the commission?

    A $5.00   C $14.50

    B $12.50   D $25.00

36   Question 36 refers to the
following graph which shows the
percentage of people using 'EFAT'.
in different age groups.
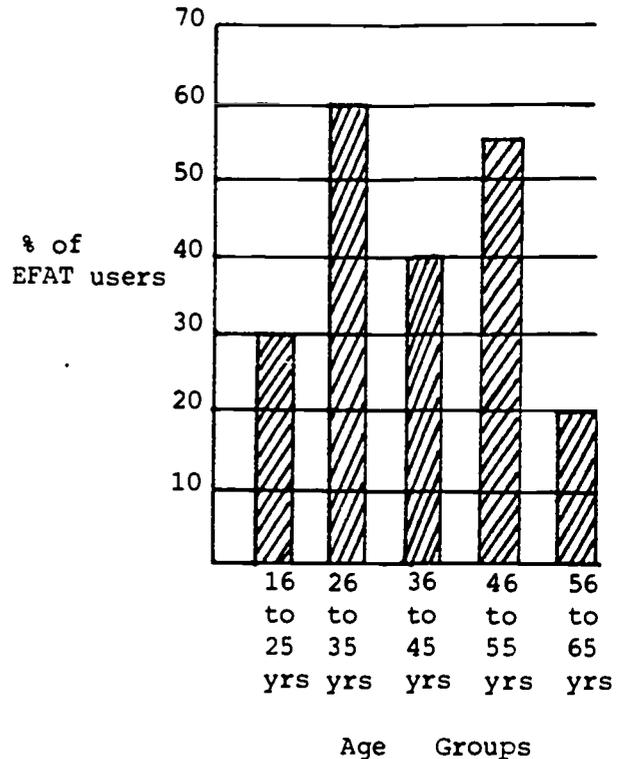
The difference between the
highest and lowest percentages
using 'EFAT' is

    A 10%   C 30%

    B 20%   D 40%

37 Question 37 refers to the following graph showing changes in temperature over time.
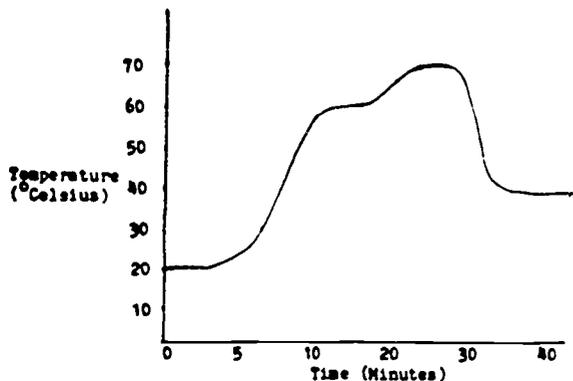
What will be the temperature after 50 minutes?

A 70°C   C 20°C

B 40°C   D There is not enough information to decide.

38 Question 38 refers to the following table which shows the relationship between drills using Imperial and Metric units and the size of the hole they drill.

Old system, fraction of an inch	New system, millimeters	Diameter hole dril as a deci of an incl
	11.5	.4528
29/64		.4531
15/32		.4687
	12.0	.4724
31/64		.4844
	12.5	.4921
1/2		.5000
	13.0	.5118
33/64		.5156
17/32		.5312
	13.5	.5315
35/64		.5469
	14.0	.5512
9/16		.5625
	14.5	.5709
37/64		.5781
	15.0	.5906
19/32		.5937
39/64		.6094
	15.5	.6102
		.6299
5/8	16.0	.640b

If a person wanted to drill a 13.0 millimeter hole but only had an old set of drills marked in fractions of an inch, which of the following drills would give the closest fit.

A 1/2 inch   C 12.5 in

B 33/64 inch   D 13.5 in

SELECTION TESTS FOR TRADES

READING

DIRECTIONS

The questions in this test are based on two reading passages. Each question
is followed by four choices for an answer. Read each question and then
decide which one of the four choices is the best answer. In deciding, use
only the information given in the passage.

On the separate ANSWER SHEET find the row of letters - A, B, C, & D, which
has the same number as the question you are answering. Next, put a line in
the space between the dotted lines under the letter which you have chosen.

FOR EXAMPLE

Q.   Pre-vocational courses are held at
        A Colleges of Advanced Education
        B Universities
        C TAFE Colleges
        D Institutes of Technology

        Sample of ANSWER SHEET showing how the correct answer, C, is entered.

Q.
A	B	C	D
::	::	▓	::

MAKE YOUR LINE THICK
AND HEAVY

If you make a mistake, and wish to change an answer simply cross out the
wrong answer and put a line between the dotted lines which correspond to
your new answer.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD

PLEASE DO NOT MAKE ANY MARKS IN THIS BOOKLET

Read the following passage and then answer the questions 1 to 10 that
follow.

Electricity must be treated with respect, for while it is a helpful
friend it can be a dangerous enemy.

In case of emergencies such as an electrical fire, or someone getting
an electric shock, it is essential to know what to do, so that you can
act quickly. The sooner the right action is taken, the easier it is to
control a fire and the less the damage done to people and property.

In many accidents involving electricity, the first step must always be
to cut off the supply of electric current. Usually this can be done
by switching off the power. But don't take any chances, the switch
may be live! Do not touch it with your bare hand, or anything metallic
or wet. Water and many metals are good conductors of electricity.
Use something, such as a piece of wood, which is not a good conductor.

If a person has had a mild shock the next step is to check whether he
or she has any burns. Treat these as you would ordinary burns, flooding
them with cold, clean water. Take care to keep the water well away from
the electrical appliances and outlets. If the burn looks serious, call
a doctor immediately.

A severe electrical shock can be very dangerous, it may even be fatal.
Always assume that the victim may be electrified until the power source
is removed. When the power cannot be turned off quickly, you must
separate the victim from the electric current before doing anything else.

The victim's breathing may stop. Mouth to mouth resuscitation should be
given as soon as the victim is separated from the electric current. Delays
in doing this can lead to brain damage. Shock victims should never be
moved unless this is essential to enable them to breathe or to remove them
from the source of electricity. A doctor should be called as quickly
as possible.

If an electrical appliance short circuits and begins to burn, try to
disconnect it immediately and make sure there is nothing flammable
nearby. Take care not to touch it while it is live, or very hot. Never
use water or wet materials to put out an electrical fire. There are
specially designed fire extinguishers for putting out electrical fires.
If your work place has one, learn how to use it before you need it!

Short circuiting of electrical appliances can often be prevented by
simply taking care. For example, never lift electrical appliances by
their leads. Make sure that the appliance's air ventilation holes are
free from blockages. If electrical appliances have frayed cords,
cracked insulation or develop a strange smell, do not use them. Report
the problem to whoever is in charge of your work.

1.   According to the passage if som one is receiving an electric
      shock from a live wire, the FIRST thing you should do is:

            A   call a doctor

            B   give mouth to mouth resuscitation if needed

            C   treat any burns or other injuries

            D   cut off power or get wire away.

2.   What reason is given in the passage for not touching a victim
      who had recently received an electric shock?

            A   The victim may have broken a bone.

            B   A doctor must first give advice.

            C   The victim's body may still be electrified.

            D   Shock victims should not be moved.

3.   There are a number of skills people can learn for coping with
      accidents involving electricity. Which one is NOT suggested
      by the passage?

            A   mouth to mouth resuscitation

            B   use of fire extinguishers

            C   first aid for burns and shock

            D   heart massage

4.   According to the passage if you were to touch someone who was
      receiving a mild electric shock, which one of the following
      is most likely to happen?

            A   You would also get an electric shock

            B   You would be unable to breathe

            C   The person might die

            D   The person might get brain damage

5.   Which one of the following reasons is given in the passage for
      moving the victim of a severe electric shock?

            A   To help the victim feel comfortable.

            B   To enable the victim to breathe.

            C   To stop the victim getting muscular cramps.

            D   To move the victim away from water and metals.

6.   Which ONE of the following safety checks for electrical appliances
      is NOT suggested in the passage?

            A   Check that the insulation is in good condition.

            B   Check that the cords are not frayed.

            C   Check that the air ventilation holes are not blocked.

            D   Check that there is no rust on the appliance.

7.   Accordi. : to the passage which one of the following applies
        to ALL electric shock victims?

                A   They need a doctor immediately

                B   They should be separated from the electric current

                C   They will have burns requiring treatment

                D   They should be given mouth to mouth resuscitation

8.   All, except one, of the following safety precautions, are given
        in the passage.   Which one is not given?

                A   Do not use your bare hands to touch anything
                     which may be electrified

                B   Assume a shock victim's body is electrified until
                     you know the power is off

                C   Ring the fire alarm and summon help

                D   Keep moisture away from anything which is
                     electrified.

9.   " ......while it is a helpful friend it can be a dangerous enemy."
        What does this mean as it is used in the passage?

                A   A friendly electrician can be turned into an enemy

                B   Electricity in the wrong hands makes life dangerous

                C   Electricity makes life a lot easier but it can also
                     do a lot of damage

                D   Only electricians should use electrical appliances in
                     case they are dangerous.

10.   Which one of the following best summarises what this passage
        is about?
                A   Preventing and dealing with electrical accidents.

                B   Good electrical appliances.

                C   Switching off after accidents.

                D   First aid after electric shock.

- GO   STRAIGHT   ON -

Read the next passage and then answer questions 11 to 17 that follow.

TAFE provides pre-vocational and pre-apprenticeship courses for young people who are considering entering a trade. Commonwealth and State Authorities, employers and unions all assist TAFE staff to develop these courses.

The courses are designed to provide students like yourself with a chance to learn about one or more trades, and to teach you some skills that employers will find useful. During the course you will develop both vocational and social skills, safety awareness and an understanding of work situations, machines, tools and materials. By the end of the course you will have a better idea of what it would be like to work in a particular trade, and know whether it is right for you. If you are not suited to a trade, it is much better to find this out before you have committed yourself to an apprenticeship.

All pre-vocational and pre-apprenticeship courses involve periods of unpaid work experience. This is an ideal way to find out whether you are suited for a particular job. During work experience you actually work with an employer at a factory, workshop, or business. This means you experience the working conditions involved in doing the job. These may be quite unpleasant, involving dirt, noise, working at heights, etc., and you must decide how important this is to you. Work experience also provides you with the opportunity to talk with work mates who have had experience working in the trade. As well, it gives you a chance to use some of the trade skills you have been learning during the course. Perhaps best of all, it gives you that most important asset when looking for a job, a bit of experience.

You will find a TAFE College very different from school. At TAFE you are regarded as a young adult, and are given the rights and responsibilities that go with this.   No one will mother you here, it is up to each individual to make the most of the opportunities provided. But TAFE does provide student counsellors to help with students' problems. Counsellors are helpful, caring people who have had a lot of experience with young people. If asked, they will work with students to help them find solutions to personal or course - related problems.

11. Which one of the following best summarises
     what this passage is about?

     A   How student counsellors can help you.

     B   Services available to TAFE students.

     C   Information on TAFE pre-vocational and pre-
          apprenticeship courses.

     D   The benefits of work experience for TAFE
          students.

12. Which of the following groups does the passage say
     assist TAFE staff in developing courses?

     A   Students and student counsellors.

     B   Government and industry representatives.

     C   Teachers from local schools.

     D   The Commonwealth Employment Service.

13. Student counsellors help TAFE students by:

     A   Assisting the students to find a
          solution to their problems.

     B   Arranging the students' work experience
          with employers.

     C   Deciding which students are suitable for
          particular trades.

     D   Solving the students' personal and course
          problems for them.

14. All of the following benefits of work experience are mentioned
     in the passage except one. Which one is NOT mentioned?

     A   Learning to cope with a variety of
          TAFE courses.

     B   Finding out whether you ar suited to a trade.

     C   Mixing with experienced tradespeople.

     D   Practising skills you were taught in your
          theory course.

15. According to the passage TAFE Colleges DIFFER from schools
     because at a TAFE College students

     A   are older

     B   can consult counsellors

     C   are given more responsibility

     D   are free to choose their rights.

16.   Which one of the following was most probably the main
        purpose of the person who wrote the passage?

        A   Persuading the general public to enrol in TAFE
             pre-vocational and pre-employment courses.

        B   Providing details about different courses
             available at TAFE colleges.

        C   Showing the ways in which work experience can
             be a help to people seeking jobs.

        D   Explaining what it would be like to do a
             pre-vocational or pre-employment TAFE course.

17.   According to the passage, which one of the following statements
        would best describe TAFE pre-vocational and pre-employment
        courses?

        A   Courses which teach you to become a competent
             tradesperson.

        B   Courses which introduce you to trades and
             give you some relevant skills.

        C   Courses designed for young people who did
             not like academic subjects at school.

        D   Courses for people who are having difficulty
             finding a job.

AUTOMOTIVE TRAINABILITY TEST: FITTING A TRAILER REAR LIGHT ASSEMBLY

INTRODUCTION

This test involves an instructor demonstrating the fitting of a trailer rear light assembly and the trainees/applicants then carrying out the same task under supervision. The performance of the trainees/applicants is assessed against an error checklist.

The demonstration takes approximately 15 minutes and the trainees/applicants are allowed 30 minutes to complete the task.

MATERIALS SUPPLIED

The task is demonstrated using a board and parts as shown in the diagram.
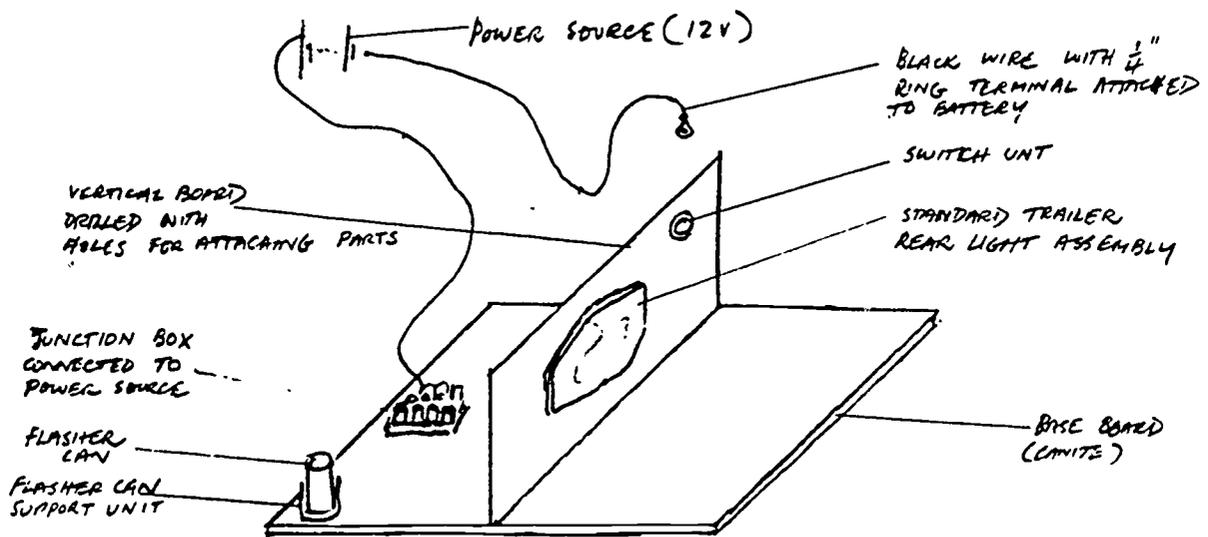
TOOLS

- 1 x SMALL PHILLIPS HEAD SCREWDRIVER
- 1 x MEDIUM PHILLIPS HEAD SCREWDRIVER
- 1 x SMALL FLAT HEAD SCREWDRIVER
- 1 x MEDIUM FLAT HEAD SCREWDRIVER
- 1 x WIRE STRIPPER WITH CRIMPER
- 1 x 8mm RING SPANNER

At the start of the task

. the junction box is connected to the power source but no
   other wires are connected to the board
. the flasher can and its support unit are in place
. the switch unit is in place
. the rear light assembly is completely dismantled.

THE DEMONSTRATION

The instructor follows the steps as set down below, explaining in
words what is being done at each stage.

Instructors should use the following outline only as a guide,
putting each step into their own words. The trainees/applicants
are given three diagrams (I, II and III) showing different views
of the task. These should be referred to when appropriate during
the demonstration.

EXPLAIN TO THE TRAINEES/APPLICANTS THE FOLLOWING POINTS

1. They are taking a test to see how well they can fit a
    trailer light assembly.

2. That the task is going to be demonstrated first.

3. That during the demonstration they can ask any questions
    they like.

4. That when they do the task they must follow the same
    sequence as the one demonstrated--they must not try to do it
    some other way.

5. That while they are doing it they will be assessed by
    supervisors (or by the demonstrator).

6. That they will have 30 minutes to complete the task.

NOW BEGIN THE DEMONSTRATION

7. First fix the base of the assembly to the board making sure

    i)   the 1/4" ring terminal from the power source (black
         wire) is attached by the nut at the rear of the board.
    ii) this nut is on the right hand front side--its screw
         connects to the earth strip on the base of the assembly
         (show this strip and explain that it is possible to put
         base on upside down).
    iii) the nut is held by the 8mm ring spanner while screwing
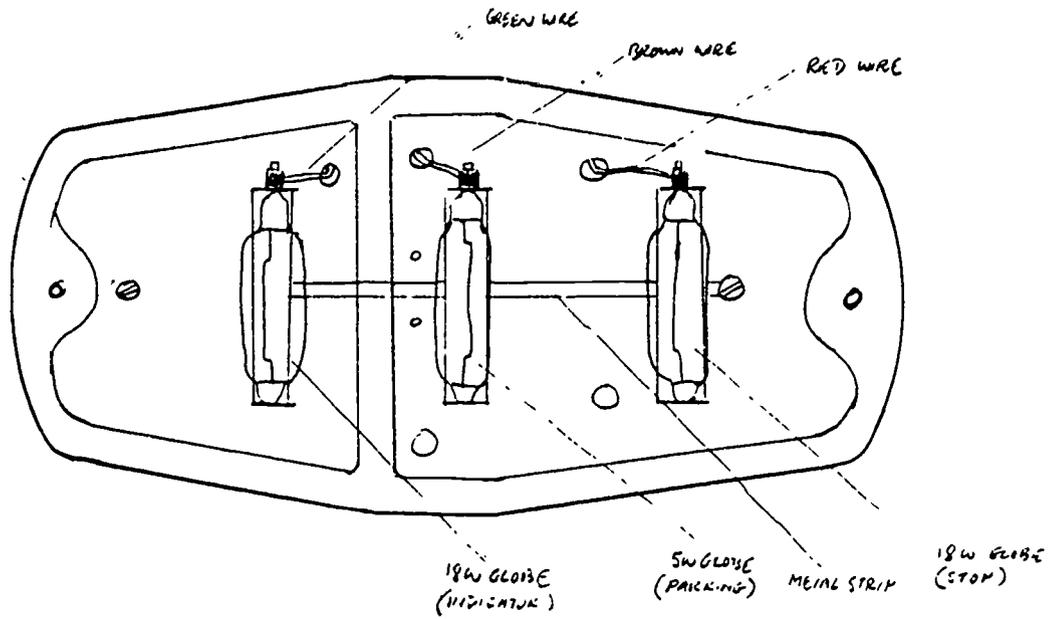   with medium flat head screwdriver.

8. There are three globes to fit; two are 12v, 18w and one is 12v 5w; the 12v 5w globe is the parking light and must go in the centre.

9. Use the green wires to connect the Flasher Box making sure

    i)   about 1cm of the ends of the wires are stripped.
    ii)   the ends are twisted.
    iii) female terminals are attached to one end of each of the wires using the crimping tool.
    iv)   the bare end of the wire goes into the first of the junction box points and is screwed in using the small flat head screwdriver.
    v)   the female end of this wire is attached to the 'B' (battery) terminal of the Flasher Box.
    vi)   the bare end of the other green wire is passed through the hole in the base on the same side as the flasher box and attached to the terminal of the front left hand globe using the small Phillips head screwdriver.
    vii) the female end of second green wire is attached to the 'L' (light) terminal of the Flasher Box.
    viii) stress that wires should be attached firmly but not too tightly as tight screwing can cut through wires.

10. St.ip both ends of brown wire and use to connect the second point of the Junction Box to the terminal of the centre (parking) globe.

11. Strip both ends of the two red wires and

    i)   connect one end of each to the two terminals on the switch unit using the medium flat head screwdriver.
    ii)   connect one end of one of the red wires to the third point on the junction box.
    iii) connect the remaining end of the other red wire to the terminal of the remaining globe after passing it through the hole in the base.

12. Fit metal dividing plate into plastic light cover by

    i)   ensuring metal is in groove on amber side.
    ii)   clips at top overlap into red side.

13. Attach plastic cover firmly (but not too tightly) to base using medium head Phillips screwdriver.

14. To help with the task a list of the steps to be followed is provided along with 3 diagrams.

.   DIAGRAM I shows the board and assembly with only the
    power source wire fitted.
.   DIAGRAM II shows a front view of the light assembly
    with the cover removed.
.   DIAGRAM III shows a rear view of the wiring of the
    mounting board.
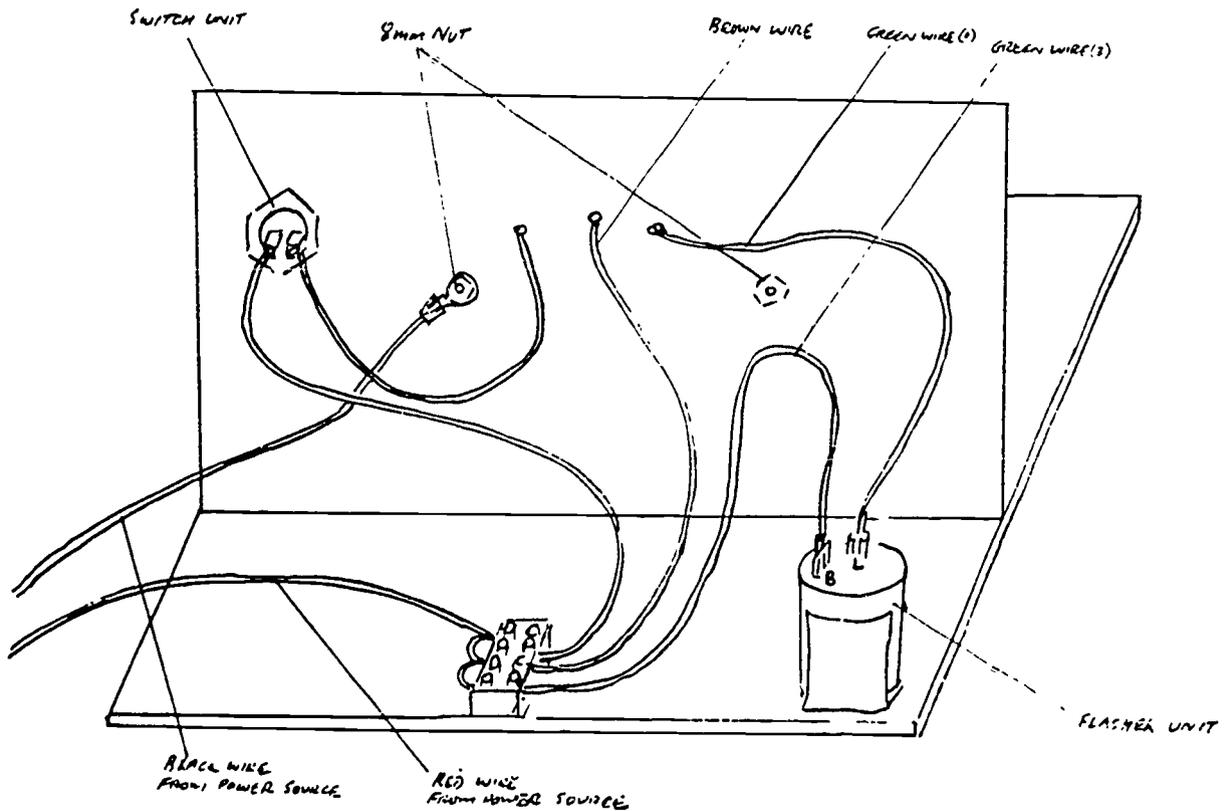
15. Any more questions?

16. Now complete the task with the aid of the Diagrams.   From
     now on there can be no questions, there are 30 minutes to
     complete the work.

DIAGRAM II

GREEN WIRE
BROWN WIRE
RED WIRE

18W GLOBE (INDICATOR)
5W GLOBE (PARKING)
METAL STRIP
18W GLOBE (STOP)

TRAILER LIGHT ASSEMBLY : FRONT VIEW WITH COVER REMOVED

DIAGRAM III

SWITCH UNIT
8mm NUT
BROWN WIRE
GREEN WIRE (0)
GREEN WIRE (3)

FLASHER UNIT

BLACK WIRE FROM POWER SOURCE
RED WIRE FROM POWER SOURCE

REAR VIEW OF MOUNTING BOARD

ERROR CHECKLIST

The task of the supervisor is to watch the trainees/applicants carefully while they are working through the various stages. Errors should be noted as they occur with a tick on the following checklist. Note that some errors can occur at more than one stage (e.g. using the wrong screwdriver). The number in parenthesis at the end of a line on the checklist indicates the total number of times this error can be made.

A tick should be made each time the error occurs.

The checklist has been divided into the six steps the trainees/applicants have been told to follow.

<div align="center">

CHECKLIST

</div>

Fitting base

1/4" ring terminal fitting to wrong side (1) _____

base upside down (1) _____

8mm end of ring spanner not used (2) _____

medium flat head screw driver not used (2) _____

Fitting globes

globes in wrong sequence (1) _____

Connecting flasher box and indicator globe

too much or too little wire stripped (4) _____

ends of wire not twisted (4) _____

female terminals not correctly crimped (2) _____

green wires incorrectly attached to flasher box (1) _____

small flat head screwdrivers not used in attaching
  to junction box (1) _____

small Phillips head screwdrivers not used in
  attaching to globe terminal (1) _____

Connecting parking globe

too much or too little wire stripped (2)   _____

ends of wire not twisted (2)   _____

small flat head screwdriver not used in attaching
   to Junction Box (1)   _____

small Phillips head screwdriver not used in
   attaching to Globe Terminal (1)   _____

Connecting switch unit and stop globe

too much or too little wire stripped (4)   _____

ends of wire not twisted (4)   _____

small flat head screwdriver not used in attaching
   to Junction Box (1)   _____

small Phillips head screwdriver not used in
   attaching to Globe Terminal (1)   _____

medium flat head screwdriver not used in attaching
   to Switch Unit (2)   _____

Fitting metal plate in plastic cover and attaching to base

metal plate incorrectly fitted (2)   _____

medium Phillips head screwdriver not used (2)   _____

unit too loose or too tight (by feel) (1)   _____

General errors

not retwisting frayed wires after they have passed
   through holes (3)   _____

screwing down too tightly on wires (8)   _____

unit fails to work when switch depressed (1)   _____

NAME OF TRAINEE/APPLICANT   _____

NAME OF SUPERVISOR   _____

SUPERVISORS COMMENT'S (Please note anything about the testing process that you consider important to any assessment of the trainee/applicant).

_____

_____

TAFE NATIONAL CENTRE FOR RESEARCH AND DEVELOPMENT LTD
296 Payneham Road, Payneham. South Australia 5070 Australia Phone 08 42 11 6

The TAFE National Centre is developing an improved set of measures to select amongst applicants for places in pre-vocational trades-based courses. It is intended to use a profile approach for selection so that each applicant's strengths and weaknesses can be identified across a range of characteristics.

Information to make up the profiles is being obtained from six instruments, namely:

- a reading test
- a mathematics test
- a practical test which assesses aptitude for training
- a personal statement
- an interview
- a school statemen

It is hoped that this approach will lead to an increase in the competency level of tradespeople, reduce the 'drop out' rate and increase the job satisfaction of individual tradespeople.

Each of the six instruments listed above is being tried out as part of a national study on selection procedures in TAFE. We are seeking your assistance with one of the instruments - the school statement.

We have obtained the written permission of the students whose names appear at the top of the following forms to approach you for the information.

It is unlikely that one teacher will have the knowledge to respond to all items on the following pages. Would you therefore please make the teacher who is best placed to gather the required information responsible for completing the forms.

Teachers are asked to complete both sections of the statement, namely:

- ACADEMIC ACHIEVEMENT and
- PERSONAL QUALITIES AND CAPABILITIES

and return in the attached envelope.

It is possible that the information required about ACADEMIC ACHIEVEMENT is already contained in a report or statement prepared by the school. If you believe this is the case, a copy of the report or statement can be returned with the completed PERSONAL QUALITIES AND CAPABILITIES section.

Your co-operation in this will be of real assistance in helping young people in the future.

Should you have any queries about this project please ring me at the TAFE National Centre (08) 42 7905.

Yours sincerely,

PETER THOMSON
Deputy Director.

TAFE NATIONAL CENTRE FOR RESEARCH AND DEVELOPMENT LTD
296 Payneham Road, Payneham, South Australia 5070 Australia Phone (08) 42 79:5
(Incorporated in South Austra m

Our Reference: PT/lh

To: The Principal

Dear   .

SCHOOL STATEMENT FOR PRE-VOCATIONAL COURSE APPLICANT

_____has applied for entry into the
(name of applicant)

_____ ___Pre-Vocational Course.
                    (course)

Some information about this applicant is being sought from the school. We
have obtained the applicant's written permission to approach you for the
information which is being gathered as part of a national study on
selection procedures in TAFE.

It is unlikely that one teacher will have the information to respond to
all items on the following pages. Would you therefore please make the
teacher who is best placed to gather the required information responsible
for completing the forms.

The information will be used by a panel who are selecting the applicants
for the course. Our national study will follow up the performance of ti. se
who have been selected so that a better and more equitable method of
selection can be developed.

Teachers are asked to complete both sections of the statement, namely

                    . ACADEMIC ACHIEVEMENT and
                    . PERSONAL QUALITIES AND CAPABILITIES

and return in the attached envelope.

It is possible that the information required about ACADEMIC ACHIEVEMENT is
already contained in a report or statement prepared by the school. If you
believe this is the case, a copy of the report or statement can be returned
attached to the completed PERSONAL QUALITIES AND CAPABILITIES form.

Attached is a brief outline of the project which is the origin of this
request. We would be happy to provide any other information that you require.

Thank you for your assistance.

Yours sincerely,

PETER THOMSON   71
Deputy Director   64

┌───┐
│ STUDENT'S   │
│ NAME: │
└───┘

ACADEMIC ACHIEVEMENT OVER LAST 12 MONTHS

Decisions about the applicant's academic achievement are to be made using the objectives of the subject as the criteria. That is, the applicant's performance is to be rated against his or her ability to master the various objectives laid down in the syllabus.

Please do not rate the applicant in terms of how well he or she has done compared with other students in the subject. (It is possible to have a good mastery of a subject but to still rank low in the class.)

NB   The teacher's concept of BORDERLINE is very important; in some ways it is analogous to survival skills in Basic Education. If students are below the borderline they do not have enough knowledge or skills to function in that subject.
     e.g. a year 10 student who was unable to read a simple passage from the daily newspaper with understanding would be below borderline in English.

Tick the box ☑ which most closely corresponds with your judgment of the applicant. Only use the NOT APPLICABLE box when it has not been possible to assess achievement in a subject.

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PERSONAL QUALITIES AND CAPABILITIES

Please rate the applicant on each of the characteristics listed below.

Each judgment is made against the criteria of what you as a teacher believe
to be a 'satisfactory performance'.

Remember to judge the applicant against your own standards each time;
you are not comparing the applicant with other students at the school.

Tick the box   ☑   which most closely corresponds with your judgment of the
applicant. Only use the NOT APPLICABLE box when you have no knowledge of
that particular quality or capability.

CO-OPERATION WITH PEERS -
works well with peers

CO-OPERATION WITH THOSE IN AUTHORITIY -
co-operates with teachers when requested

RELIABILITY - arrives on time, meets
time schedules and deadlines

WRITTEN COMMUNICATIONS - expresses ideas
clearly in writing

SPOKEN COMMUNICATIONS - expresses ideas
clearly when speaking

SELF-RELIANCE - works without supervision

SELF-AWARENESS - is aware of own strengths
and weaknesses

PERSEVERANCE - will keep trying, not
easily discouraged

RESOURCEFUL - uses own initiative
to find, overcome difficulties

EFFORT - works hard whenever
necessary.

SO   YOU   WANT   TO   BE   A   HAIRDRESSER . . .

Hairdressing is one of the most sought after areas
of pre-vocational training. It appeals to those
who want a creative job which involves dealing with
people.

However, some young people have become very
disappointed on starting hairdressing when they found
it wasn't what they expected. For example, instead
of practising their skills, most of their early months
were spent sweeping floors, cleaning mirrors, fetching
coffee, and similar uninteresting tasks.

Therefore, before you begin your career, it is
important to be aware what it means to be a hairdresser.

Physically it is demanding - hairdressers are usually
on their feet all day, and during busy periods often go
without proper breaks. After working all day they may
be expected to attend lectures or demonstrations in the
evening. People who have any problems with their back,
legs or feet may find hairdressing makes their condition
much worse.

Being colourblind can also be a serious handicap as
hairdressers must work with coloured dyes. Many
chemicals are used in hairdressing, for example, in
perms, bleaching and colouring. If you suspect you
might be colourblind or you have any allergies to
chemicals, it would be wise to discuss the problem with
your doctor before you decide to join the course.

Some people are attracted to hairdressing because of its
glamourous aspects. Unfortunately the glamourous high
fashion work is only a very small percentage of
hairdressing! Most of the hairdresser's time is spent
doing much more ordinary work, with ordinary people.
Even when he or she is tired or has had a bad day, a
hairdresser must be pleasant to clients, even difficult
or demanding ones.

Before you go ahead with your application please think
carefully about what is demanded of a hairdresser so
that you can decide if it is really what you want to do.

7H

TAFE NATIONAL CENTRE FOR RESEARCH AND DEVELOPMENT LTD.
296 Payneham Road, Payneham, South Australia 5070, Australia Phone (08) 42 7905

(Incorporated in South Australia)

APPLICANT'S PERSONAL STATEMENT

H A I R D R E S S I N G

DIRECTIONS FOR COMPLETING THIS FORM

On this form you are asked to provide some information about
yourself.

.   The first section consists of simple facts such as your
     name, address and age.

.   In the next section you are asked to supply information
     about aspects of your health and physical condition which
     are important in the occupation you wish to enter.

.   The last section gives you the opportunity to provide
     information about your interests and, most importantly,
     to say why you want to enter the occuaption.

To make your task easier the form contains a number of
questions where all you need to do is tick ☑ a box.

In the last section, as well as saying why you want to do the
course, you should also say as much as you can about your
personal qualities. You should describe things about yourself
that you think might be of interest to a person who is deciding
whom to select for the course.

Make sure the information you provide is as accurate as possible.
It may be necessary for those who are selecting the applicants
to check some of the details you have provided.

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Section 1

1.1   NAME:_____   _____
                      (Surname)   (First name)

1.2   ADDRESS:_____

                _____POSTCODE:_____

1.3   TELEPHONE No:_____

1.4   SEX: Male ☐   Female ☐   (Please tick correct box)

1.5   AGE:_____   DATE OF BIRTH:_____
                                                      Day/Month/Year

1.6   EMPLOYMENT: Have you had any full-time or part-time
                     jobs or taken part in any work experience
                     programs over the last 12 months?

                     NO   ☐   (if NO, go to 2.1)

                     YES   ☐   (if YES, please give details below)

EMPLOYMENT OVER LAST 12 MONTHS			
EMPLOYERS NAME (e.g. Acme Industries Macdonalds, etc.)	TYPE OF WORK (clearer, typist, stacker, etc.)	HOURS OF WORK (e.g. full-time, 1 day/ week, etc.)	PERIOD EMPLOYED from to (date) (date)
Phone No.			
Phone No.			
Phone No.			

SECTION 2

Before completing this section it is important to have read
the introductory information 'SO YOU WANT TO BE A HAIRDRESSER'
which explains some of the problems hairdressers can have.

2.1   Do you know of any physical condition that might be
       a problem if you were to work as a hairdresser?

       NO   ☐   (if NO, go to 3.1)

       YES   ☐   (if YES, please give details below)

SECTION 3

3.1   What are your hobbies and interests?   (Tick the ones
       that apply to you.)

       collecting things ☐   painting, drawing   ☐

       photography   ☐   acting   ☐

       knitting, sewing   ☐   carpentry, woodwork ☐

       making models   ☐   sport   ☐

       listening to music ☐   other (please   ☐
                                 specify)
       playing music   ☐   _____

       watching films   ☐   _____

       watching plays,   ☐   _____
       ballet

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3.2   Do any of your hobbies or interests involve belonging
to a team, club or society?

NO   ☐   (if NO, go to 3.3)

YES   ☐   (if YES, please give name of team,
club or society)

3.3   Are you, or have you ever been, an official in any
team, club or society?

NO   ☐   (if NO, go to 3.3)

YES   ☐   (if YES, please give name of team,
club or society)

3.4   Have you ever worked (whether paid or unpaid) in a
hairdressing salon?

NO   ☐   (if NO, go to 3.3)

YES   ☐   (if YES, please give name of team,
club or society)

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3.5   Finally, please explain why you want to do this
course. You should say what aspects of the work
appeal to you and what personal qualities you have
which make you suited to the work. (You can use
the back of this page to write on as well.)

TAFE NATIONAL

INTERVIEWS

The profile of selection measures being devised by the TAFE National
Centre for Research and Development includes an interview.

The aims of the interview are:

1.   to help in the selection of the most suitable students for the
        course and trade.

                'Suitable' is defined here as those who would
                be able to cope with the demands of the course
                and trade, who would find the work suits their
                interests and personality and who at the end
                of the course, would be acceptable to industry

2.   to provide applicants with information about the course and to
        discuss any queries or uncertainties they might have

3.   to provide an element of self-selection by encouraging applicants
        to evaluate their own abilities, interests and motivation to do
        the course and to work in the industry.

                Obviously unsuitable applicants should be assisted
                to realise this for themselves and be given
                information about remedial, bridging or alternative
                courses.

Interviews are used extensively in selection by employers and by many
TAFE Authorities. However, interviews can have a low reliability.
Reliability can be improved by using a standardised interview and so it
is emphasised that the procedure given here should be followed as closely
as possible.

Care must be taken when drawing up a time table of interviews to allow
adequate time for each interview (15 minutes minimum). Interviewers
should have read through all the relevant information about the interviewees
before the actual interview occurs. An additional five minutes should
also be allowed before each interview for checking through the personal
statement, the school statement and academic record, plus any references
which have been provided. Applicants who are waiting for an interview
should be asked whether they have brought any references or other
information so that these too can be read by the interviewers before the
interview. After the interview a further five minutes must be allowed for
the interviewers to rate the applicant and complete the entire form before
beginning the next interview. Thus a total of 25 minutes minimum should
be allowed for each applicant. Care must be taken not to run over time
as long waiting times for interviews can make applicants very nervous, or
alienate them. Rest periods should also be time tabled as interviewers must
be relaxed but alert.

It is imperative that at least one interviewer is very familiar with
the course for which the applicant is applying. (This is so that he or
she is able to consider how suitable each applicant would be for the
particular course, and also to answer any questions the interviewee may
ask.) Sometimes it is a good idea to have an industry representative
present, and if the applicant is from an under-represented group (e.g. a
female hoping to enter a traditionally male-dominated trade, or an
Aborigine) a member of that group is sometimes invited onto the panel.
However, a large interview panel of adults may be very daunting for a
teenage applicant so numbers should be kept to a minimum.

Where more than one interviewer is used, a chairperson should be chosen
to lead the interview. It is usually best to have the person who is most
familiar with the course take this role. This person, or the single
interviewer, is responsible for ascertaining that the interview room is
comfortable, private and quiet and that there will be no interruptions
during the interview (e.g. ensure telephone calls are not put through).

The main tasks of the chairperson are:

.   to introduce the applicant to the members of the selection panel;

.   to put the applicant at ease from the start of the interview by
        establishing a relaxed but not too informal atmosphere;

.   to ensure that things run on time;

.   to make sure that the interview flows properly, i.e. that there
        are no long, embarrassing silences;

.   to ensure that the interviewee has time to think and is allowed
        to finish his or her answers;

.   to keep the interview to the structure provided;

.   to pursue relevant leads;

.   to simplify or explain any questions which the applicant may
        appear not to understand.

After a few general remarks to allow the interviewee to settle down, the
interview should start. The structured interview schedule which follows should be
used as a general guide and irrelevant digressions avoided. However, care
must be taken not to follow it so rigidly as to lose important information
which could be gained by following unanticipated leads as they arise.

It will sometimes be possible to make judgements during the interview, but
often it will be necessary to wait until the end as new information may
arise.

It is preferable not to take notes during the interview, as this can
destroy rapport, and, in any case, the form will be completed immediately
afterwards. The applicant must be given a rating on each of the four
categories - ability to communicate, motivation, personality and presentation.
Interviewers should try to spread their ratings over all four columns so
that distinctions can be made between applicants.

INTERVIEW   FORMAT

Things to consider throughout the interview are:

1.   How the applicant behaves during the
      interview (allowing for nervousness) - are
      warmth and courtesy shown?

2.   Does the interviewee appear overconfident
      or too tentative?

3.   Does the applicant listen carefully?

4.   Do his or her responses to questions show
      sensible judgement?

5.   Is the interviewee able to explain things
      clearly?

6.   Does the applicant have a clear and pleasant
      way of speaking?

General

Introduce the applicant by name to all interviewers. Begin with some
general comments while the interviewee is settling down.

Discuss the following topics:

  . anything requiring clarification in any of the documents
    accompanying the application;

  . any leads from the personal statement;

  . which school subjects he/she most enjoyed and why;

  . which school subjects he/she least enjoyed and why;

  . any uncertainties or queries the applicant may have
    about the course or trade;

  . the applicant's expectations of the course. Stress
    should be placed on the fact that while every help will
    be given to pre-vocational graduates in finding
    apprenticeships, no guarantee can be given that they
    will get one.

Motivation

Ask the following questions (the questions can be put into your own words -
just make sure they cover the appropriate points)

- Wha is it about (   ) that appeals most to you?

- Are the: some aspects of doing the course that have particular
  appeal?

- Are there any aspects which particularly concern you?

- What (   ) skills have you used on yourself or
  others?

- How do you feel about having to spend a lot of time doing cleaning
  and similar work instead of being able to practise skills?

- What do you see yourself doing in five years' time?

- How do you feel about returning to full-time study at college
  for a year?

Personality (possible extra questions)

- Do you feel comfortable talking with older people?

- Are you able to relax and chat with strangers?

- How would you deal with a customer who criticised the
  way you were doing things?

Points to be taken into account during the interview are:

- is the applicant well groomed (clean hair, nails, shoes, etc)?

- do you believe the applicant (after twelve months on the course)
  would be acceptable to industry?

If the applicant is obviously unsuitable

Discuss:

- Possible remedial or bridging courses and/or alternative
  courses for which he or she might apply.

- Vocational guidance services available.

Finish by thanking the applicant and letting him or her know when to
expect to hear further from TAFE.

COMPLETE THE FORM BEFORE COMMENCING THE NEXT INTERVIEW

PRE-VOCATIONAL   SELECTION   INTERVIEW

APPLICANTS NAME: ....

COURSE: ....   DATE: ....

INTERVIEWER: ....

DIRECTIONS:

Please rate the applicant on each of the following four characteristics.

Each judgment is made against the criteria of what you as an interviewer
believe to be a 'satisfactory standard' on each of the 4 characteristics.

In making your judgments keep the standards of the industry in mind, certain
characteristics are more important in some occupations than others.

Remember to judge the applicant against your own standards each time; you are
not comparing the applicant with other interviewees.

Tick the box [✓] which most closely corresponds with your judgment
of the applicant.

A 'comments' section is provided below. Please use this section to elaborate
on the applicant when necessary. This is a particularly important requirement
when you rate a person as 'OUTSTANDING' or 'BELOW BORDERLINE'.

CHARACTERISTICS

CHARACTERISTICS	BELOW BORDERLINE	BORDERLINE TO FAIR	SATISFACTORY TO HIGH	VERY HIGH TO OUTSTANDING
ABILITY TO COMMUNICATE				
LEVEL OF MOTIVATION				
PERSONALITY				
PRESENTATION				

(table header: STANDARD)

COMMENTS: (Please add any further information you think is important,
            but especially elaborate in cases where applicant was
            OUTSTANDING or BELOW BORDERLINE)

RATING SCALE

NAME: DATE:

AGE: SEX:

LANGUAGE SPOKEN AT HOME:

EXPERIENCE OF HAIRDRESSING:

Rating of evidence of real interest in hairdressing:

    A. extremely good

    B. fairly good without being outstanding

    C. average

    D. minimal or no evidence of real interest

Personal presentation:

    A. neat, well groomed, well presented - shoes in good
        condition, clean nails, etc.

    B. reasonable presentation

    C. poor presentation, unkempt

Personality:

    A. outstanding

    B. bright, smiled frequently

    C. average

    D. dull

Pearson's product moment correlation coefficient (r) - obtained using the formula.

$$r = \frac{N \Sigma XY - \Sigma X \Sigma Y}{\sqrt{[N \Sigma X^2 - (\Sigma X)^2][N \Sigma Y^2 - (\Sigma Y)^2]}}$$

where N = number of cases (pairs of scores)
      X = raw score ('independent' variable)
      Y = raw score ('dependent' variable).

This is the most commonly used measure of correlation between two variables.

'r' can range from a maximum of +1 (in which one variable scores an exact, direct linear relationship to the other through zero (in which no linear relationship exists) to -1 (in which an exact, inverse linear relationship exists).

By squaring and multiplying the result by 100 it is possible to specify how much of the variance in one variable can be predicted from the variance in the other, e.g.

- r = +0.8 would indicate a reasonably strong correlation between two variables for (say) a sample of 20 cases.

- $r^2 \times 100 = 0.64 \times 100 = 64$. Thus 64% of the variance in one variable can be predicted from the variance in the other.

The significance of the correlation coefficient can be calculated using tables of the distribution of Students t by means of the formula

$$t = r \sqrt{\frac{N - 2}{1 - r^2}}$$

where r = Pearson product moment correlation coefficient
      N = number of cases (pairs of scores) and hence (N-2) is
          the number of degrees of freedom (df).

A range of critical values of 'r' related to degrees of freedom and levels of significance derived from the above mentioned formula is provided by Fisher and Yates (below).

Using this table, the significance of a correlation of (say) 0.55 for a sample of 18 pairs of scores (and hence 16 degrees of freedom), would lie between 0.1 (for which a correlation of r = 0.590 would be required) and 0.2 (for which a correlation of 0.542 would be needed).

In such a case, there would be a probability of between 1% and 2% that the correlation was obtained by chance, or conversely, there would be a probability of between 98% and 99% that the correlation really existed and no sampling errors occurred.

Critical values of the correlation coefficient

	Level of significance for one-tailed test			
	.05	.025	.01	.005
	Level of significance for two-tailed test			
df = n-2	.10	.05	.02	.01
1	988	997	9995	9999
2	900	950	980	990
3	805	878	934	959
4	729	811	882	917
5	669	754	833	874
6	622	707	789	834
7	582	666	750	798
8	549	632	716	765
9	521	602	685	735
10	497	576	658	708
11	476	.553	634	684
12	458	532	612	661
13	441	514	592	641
14	426	497	574	623
15	412	482	558	606
16	400	.468	542	590
17	389	456	528	575
18	378	444	516	561
19	369	433	503	549
20	360	423	492	537
21	352	413	482	526
22	344	404	472	515
23	337	.396	462	505
24	330	388	453	496
25	323	381	445	487
26	317	374	437	479
27	311	367	430	471
28	306	361	423	463
29	301	355	416	456
30	296	349	409	449
35	275	.325	381	418
40	257	304	358	393
45	243	288	338	372
50	231	273	322	354
60	211	250	295	325
70	195	232	.274	.303
80	183	217	256	.283
90	173	205	242	.267
100	164	195	230	.254

FROM R A Fisher and F Yates *Statistical tables for biological agricultural. and medical research* Oliver & Boyd. Ltd. Edinburgh
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TRAINABILITY - MOTOR SKILLS (sectioning and blow-drying)

4 = outstanding - only up to 2 minor errors
3 = very good - 3 or four small errors
2 = somewhat above average - one or two significant errors,
lacks real 'feel' for working with hair
1 = average - a bit rough or clumsy makes a lot of mistakes.

PERSONAL STATEMENT

When reading the statement look for:

- does the applicant seem outgoing
- does the applicant seem interested in people of all ages
- doing jobs other than hairdressing shows willing and
flexible
- if the applicant has been allowed to work at the reception
desk or do shampoos or temporary colours this indicates
that the employer has confidence in him/her
- if there are 4 or more salons as employers this is suspect
as why did he/she leave, not gain an apprenticeship. No
hairdressing employers suggests lacks initiative (unless
from country)
- variety of interests-creative, artistic
- proud of self, slightly exhibitionist - good in
hairdressing
- good if has been in teams, committees.

Overall rating based on an assessment of the above points.

5 = outstanding
4 = very good
3 = good
2 = average
1 = below average.

INTERVIEW

1 = unacceptable
2 = somewhat below average - not very articulate
3 = average fairly good - able to communicate well
4 = very good
5 = excellent.

PERSONALITY WITH CLIENT

(Assessed by lecturers, based on cbserved behaviour in college
with clients (not in classes act unless working with clients)
and work experience reports.

5 = outstanding - consistently warm, friendly, considerate
4 = very good - sometimes too concerned with the technical
    process to remember the client
3 = good - but lacks polish or ccnfidence
2 = average - unconsistent-may be moody at times or unable to
    switch off personal feelings
1 = below average - too difficult, shy, lacks confidence to
    relate to clients.