

**VOCATIONAL SKILLS TRAINING
FOR
PEOPLE WITH INTELLECTUAL DISABILITIES**

A Multi-faceted Approach

Presented by:

**Fiona Shearman
Cassie Sheehan**

SYDNEY INSTITUTE - PETERSHAM TAFE

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Fiona Shearman

Cassie Sheehan

INDEX

INTRODUCTION	1
WHY TRAIN PEOPLE WITH INTELLECTUAL DISABILITIES IN VOCATIONAL SKILLS?	2
HOW TO DETERMINE REASONABLE ADJUSTMENT NEEDS?	2
WHO SHOULD PROVIDE THE TRAINING?	4
WHERE SHOULD TRAINING OCCUR?	6
WHAT REASONABLE ADJUSTMENTS TO PROVIDE?	7
1. Adapting Verbal and Written Materials	7
2. Worksheets	10
3. Feedback - Reinforcement	11
4. Pacing	12
5. Task Analysis (TA)	13
6. Providing Assistance	14
7. Accuracy Data	16
8. Rate Data	16
9. Behaviour Management Strategies	17
10. Longer Duration And Lower Student :Teacher Ratio	19
11. Assessment Event Modification	20
FADING SUPPORT	20
TRAINING IN INDUSTRY	23
CONCLUSION	27
BIBLIOGRAPHY	28

INTRODUCTION

The focus of this paper has undergone a significant change since it was first proposed a year ago. Initially the intention was to focus on reasonable adjustments delivered to students with intellectual disabilities at Sydney Institute – Petersham TAFE. The majority of the paper was originally to examine:

WHY **train people with intellectual disabilities in vocational skills?**

HOW **to determine reasonable adjustment needs?**

WHO **should provided the training?**

WHERE **should training occur?**

Since then it has been recognised that many of the participants at the conference may be unfamiliar with the **reasonable adjustments necessary for training *people with intellectual disabilities vocational skills***. It was therefore decided to devote a major part of the paper to examining;

WHAT **reasonable adjustments to provide?**

Thus there is less emphasis on the why, who, where and how.

Many VET staff accept the need to provide reasonable adjustments for people with other types of disability i.e. people who use wheelchairs require physical access, people who are deaf require interpreters/notetakers etc. There is often less recognition of the value of providing reasonable adjustments to people with intellectual disabilities. Some VET staff believe that, because people with intellectual disabilities are slower at learning, it is sufficient reasonable adjustment to provide them with longer time to learn and smaller class ratios.

It is the belief of the presenters that in training people with intellectual disabilities vocational skills **it is not sufficient to just provide more of the same training given to students without a disability**. Instruction must be systematic. Information must be clear and precise.

The aim of this paper has therefore shifted to focusing on:

The range and variety of reasonable adjustments needed for training people with intellectual disabilities in vocational skills and how to balance the need for support with the need for the student to perform independently if they are to obtain employment?

It does not include information on how to assist students with academic tasks e.g. essay writing, research skills etc. The majority of the students with intellectual disabilities at Petersham are not in courses requiring such skills. Time constraints of the presentation also prevent such discussion of academic tasks.

WHY TRAIN PEOPLE WITH INTELLECTUAL DISABILITIES IN VOCATIONAL SKILLS?

TAFE as the major public provider of vocational education and training should also be the major provider of vocational education and training for people with intellectual disabilities.

Young people with intellectual disabilities should participate in the same range of activities as their age appropriate peers.

Employment is most important because having a job:

- is **valued** – it is considered important and enhances social status;
- **adult** – it is what the majority of adults do for a large portion of their day;
- provides **wages** → **choices** as have money to participate in other activities;
- increases **integration** – provides contacts and opportunities for other integrated activities;
- is **productive** – being engaged in worthwhile activities **increases self esteem**;
- **promotes individual growth**.

HOW TO DETERMINE REASONABLE ADJUSTMENT NEEDS?

The Australian National Training Authority (ANTA) defines reasonable adjustment as:

“measures or actions to provide substantive equality”.

and acknowledges that for adjustments to be reasonable they need to be

“appropriate for a PARTICULAR STUDENT in a PARTICULAR SITUATION”

(Australian National Training Authority (ANTA) [Bridging Pathways](#) Brisbane Queensland 2000 page 95)

People with intellectual disabilities are not a homogeneous group. All do not have the same educational needs. An individual student's reasonable adjustment needs may vary depending on the requirements of the industry and the vocational course. For example, a student who has limited literacy skills may not have the same support needs in a catering course as he/she would have in an office course.

Nonetheless, regardless of the student and the situation:

all people with an intellectual disability need information which is delivered with precision and clarity.

Determining specific strategies for ensuring this clarity and precision, is an ongoing process. Ideally it starts prior to the student enrolling in a course. Prospective students should know what vocational area they want to work in and should have had work experience in that industry to ensure that this is an informed choice. The experience of the Disabilities Unit at Sydney Institute – Petersham TAFE is that students do better if they are motivated. They are less successful if they do a course chosen by someone else or if they feel they have little choice.

Conference participants will be shown copies of the assessments that Sydney Institute – Petersham TAFE has developed for particular industry areas, e.g. hairdressing, childcare.

The assessment process usually involves the Teacher/Consultant or a Teacher – Disabilities and an industry teacher.

Components of Initial Assessment

Regardless of industry area, the components of the initial assessment includes:

Work Related Skills / Behaviours

- On time
- Appearance
- Reaction to correction
- Motivation
- Interest
- Communication
- Attention to detail

Literacy & Numeracy Skills

Comprehension Skills

The level of skill required depends on the industry and the course. For example:

- Literacy skills are more important in an office course than for a kitchen attendant course
- Verbal skills are more important in a retail course than in a kitchen course
- A higher level of literacy is required for a Diploma in Child Care than for a Child Care Traineeship
- Numeracy skills are more important for an electrical apprenticeship than for a hairdressing apprenticeship

So while these areas (work related; literacy and numeracy; comprehension) are included in all assessments, the individual items for each area are not the same. Instead the individual items attempt to compare the student's skills to the curriculum and the assessment requirements of the specific vocational course.

Industry Related Skill Areas

For each industry, specific skill areas are assessed, eg

Student wants to do

Hairdressing

Kitchen

Jewellery

Also Assess

creativity and manual dexterity

manual dexterity

fine motor

These initial assessments are a basis for the original decision about the reasonable adjustments needed for a particular student in a specific course.

This is not a static decision. It needs to be evaluated once the student is actually in the course. Ongoing assessment needs to be made to ensure that strategies introduced are successfully providing substantive equity.

WHO SHOULD PROVIDE THE TRAINING?

At Sydney Institute – Petersham TAFE, it is provided in most cases through

co-teaching strategies using 2 teachers

vocational teacher - the industry specialist

support teacher - the disabilities specialist

Many students with intellectual disabilities are trained in mainstream classes by an industry-qualified teacher e.g. Catering Teacher. It may also be necessary to have a Disabilities Teacher who is responsible for in class support. The types of support depend on the student's needs. In putting in a second teacher it is necessary to guard against stigmatising the student.

Many students with intellectual disabilities in mainstream courses have tutorials. The tutorial teacher's qualifications depend on the student's needs and the course requirements. If the course content is highly technical and or the practical skills are specific to the trade, it may be appropriate to have an industry teacher involved in providing the tutorials. In this case, the Teacher / Consultant or a Disabilities Teacher assists the industry teacher by determining appropriate training strategies and by preparing adapted teaching materials.

Due to the nature of the student's disability and the reasonable adjustments required (as determined during assessment) it may be necessary to offer a customised course. When there are a number of students with intellectual disabilities who want to work in the same industry and they all have reasonable adjustment requirements that make participation in the mainstream difficult, then a customised course may be designed to meet their needs.

Customised courses are only conducted if there is sufficient:

- student demand;
- labour market need and
- funding from other sources, eg Get Skilled or Contracted Training Program.

There is no recurrent funding for customised courses. The Disabilities Unit funds the reasonable adjustments but it is necessary to have either the relevant vocational teaching section area or an outside source fund the mainstream industry teacher.

Customised courses that have been run at Petersham TAFE are Office Assistant; Kitchen Attendant; Forklift Driver, Warehouse / Stores Person. There are other customised courses run at other colleges in the institute e.g. Child Care Assistant at Randwick; Vehicle Trades and Retail at Ultimo.

It is possible for a student to do a combination, ie some modules in mainstream (those which require minimal reasonable adjustments) and some modules in customised (those which require major reasonable adjustments).

Customised courses must have suitably qualified industry teachers – the same industry expertise as in the mainstream course. They also require a teacher with disabilities expertise. Having a second teacher results in a lower student teacher ratio and allows for more individual attention. The main reason, however, for employing a Disabilities Teacher is his/her expertise in strategies for implementing reasonable adjustments.

The two teachers co-teach (both teachers do the training). Nevertheless, their major responsibilities differ.

The industry teacher (e.g. the Catering Teacher) is responsible for the curriculum:

- industry requirements
- content info for the module main facts and learning outcomes required
- regular materials utilised e.g. written handouts
- info on regular assessment events

The Disabilities Teacher is responsible for the reasonable adjustments

- determining reasonable adjustments requirements
- modifying curriculum materials - into accessible formats
- evaluating the effectiveness of modifications (are adjustments effective?)
- collecting data on student progress etc
- suggesting assessment event modifications.

WHERE SHOULD TRAINING OCCUR?

At Sydney Institute – Petersham TAFE most cases it is both

off the job

on the job at worksites/workplaces

People with intellectual disabilities have difficulty transferring skills and therefore ideally should be taught skills in the environment in which they are going to be used i.e. on the job.

Students with intellectual disabilities who have apprenticeships are taught on the job and come to TAFE like other apprentices. Often these students have an employment support agency which specialises in assisting people with intellectual disabilities obtain and maintain jobs. There is regular communication between the TAFE Teacher /Consultant and the employment agency support person to share strategies and information on the students progress etc.

The TAFE teacher may provide additional training at the workplace if the apprentice does not have an employment support agency.

For students in mainstream courses who do not have jobs, training in the workplace is arranged either as part of their course or after their course.

Workplace training is also a main component of customised courses. Ideally the student should have already mastered the vocational skills at TAFE prior to individual placement. A TAFE teacher trains the student to do the work required so that there are few demands placed on the regular staff.

To successfully obtain and maintain employment the student must be able to demonstrate skills in a corporate or commercial environment. It is therefore not sufficient to train off the job.

Workplace training varies but always starts with a combination of on the job and off the job training (e.g. 3 days at the workplace/2 days at TAFE). Then the students time at the workplace increases until the student is there full time (e.g. 5 days per week). When the student's performance begins to meet the workplace expectations, the teacher fades out so that eventually the student is working independently.

The objective of the placement is to train the student to:

- transfer skills to the workplace
- increase rate while maintaining accuracy
- adjust to time and quantity demands
- continue working despite distractions
- work constantly without waiting for direction or reinforcement
- develop effective workplace communication skills
- demonstrate appropriate social competence

Another important benefit of this training is that at the end of the course the student receives an industry reference as well as a TAFE certificate.

In the latter part of the workplace training, the support person from the employment agency comes to the training site. This provides an opportunity to obtain from the workplace supervisor an appraisal of the student's performance in industry.

An example of a student's workplace training calendar is included in Appendix A (shaded areas are days spent on the job training).

WHAT REASONABLE ADJUSTMENTS TO PROVIDE?

Teaching guidelines that apply to other students also apply to people with disabilities:

- Be professional
- Be a positive role model
- Be prepared
- Teach for independent learning
- Make rules that you can enforce
- Only provide the student with a choice, if there is a choice
- Make the student responsible for his/her own behaviour
- Provide correction
- Treat the student as an adult
- Expect adult behaviour

People with intellectual disabilities also require additional reasonable adjustments. As stated previously, “For adjustments to be reasonable they need to be reasonable for a particular student in a particular situation” (ANTA, 2000 pg 95). What follows is a summary of the main adjustments utilised at Petersham. This is not a cookbook. Not all of the following adjustments are necessary for all students in all situations.

1. Adapting Verbal and Written Materials

* to provide clear information *

All students with intellectual disabilities require clear information. The strategies utilised to make the information clear, however vary and need to be appropriate for the student in a particular situation. The ones utilised at Petersham include:

- (i) **Short** – using only the necessary words.
e.g. ~~In hairdressing we like~~ staff to be well groomed

Teachers need to think about the clearest way to instruct beforehand.

eg.	<u>Instead of</u>	<u>Use</u>
	What I want you to do now is push the green button, so that the machine can start to work.	Push green start button

If a student does not respond in a few seconds demonstrate repeating the **same** verbal instruction (i.e. push the green start button).

Decide on appropriate verbal instruction beforehand and do not elaborate!

(ii) *Common Words* – where possible

If the technical word is required or used in industry, it should be used during training.

e.g. kitchen students should learn the term “julienne” because chefs will use this term for a vegetable cut rather than the term “match stick” although the latter accurately describes it.

Conference participants will be given an activity to select which term is more appropriate in training for industry.

e.g.	solidus	or	forward slash
	chronological	or	date order
	brunoise	or	fine dice
	collate	or	put in order

(iii) *Straightforward* - only provide need to know information

e.g. “Proper hygiene standards and legislation for food handlers dictates that domesticated animals are prohibited within the vicinity of food preparation”

May be rephrased as:

“Pets are not allowed in the kitchen”

With students who do not have disabilities, teachers often repeat their instruction in a different way and provide more information in an attempt to clarify. For students with intellectual disabilities this can be confusing and lots of verbal explanation can be overwhelming. **Don’t elaborate or clarify!**

(iv) *Use Concrete Examples* - specific to the task or concept

Show and tell!

e.g.	Measurement	use rulers, scales	kg / cms
	Size	have examples of	big / small
	Shape	have examples of	thick / thin
			oval square
			right angle

(v) *Use only necessary written handouts*

- Too many words may confuse or inhibit the student
- Use handouts for only important essential material

When rewriting handouts, ensure that they:

- contain only essential info
- are short
- are straight forward
- spaced over the whole page – not cluttered
- **Highlight** important words/ concepts
 - e.g. **bold**
 - italics*
 - change fonts
 - change colour
- **Add pictures if they add clarity** - for some students pictures are not helpful. The person taking the picture knows what it represents but the student does not necessarily understand it

Examples of information rewritten at Petersham are given in Appendix B.

Remember these examples were developed for a specific student and are not necessarily appropriate for all students with intellectual disabilities studying the same topic.

In customised courses, the Disabilities Teacher is responsible for rewriting the handouts, showing them to the industry teacher to ensure that rephrased material etc still covers the main facts.

(vi) *Alternate formats or modes*

Some students learn better from material presented in alternate modes, e.g.

- audio tapes
- video tapes
- pictorial fact sheets

Examples of these will be shown at the conference. An example of the latter is included in Appendix C.

When there is more than one teacher it is important that the information given is consistent. During learning, if different teachers are saying different things or demonstrating tasks in different ways the student may become confused.

Teachers should discuss and agree on wording, terminology and the method of doing a task beforehand.

**Information is not in clear plain English
until
you have given it to the student
and
he/she has understood it!**

2. Worksheets

- * to test understanding *
- * to provide repeated practice *

Teachers should not present information once only and presume the student has understood.

Asking if a student has understood is not testing understanding!

Most students want to please and if you ask “Do you understand?” they will often say “yes” whether they have or have not.

Some ways to test understanding are to get the student to:

- show you
- give an example
- explain

Another way information is repeated and tested at Petersham is through worksheets. The Disabilities Teacher develops a fact sheet containing the main points written in clear English. This is gone over with the student(s). Then a variety of different types of worksheets containing these main facts are usually developed, e.g.

- Draw a line
- Find a words
- Fill in the blanks (with and without choices)
- True and false
- Crosswords

For difficult concepts, worksheets are presented to students in an easy to hard sequence – i.e. draw a line, find a word, fill in the blanks with choices etc are usually easier than true and false or crosswords.

Not all students require all worksheets. They are particularly useful for a student who has memory problems or difficulty retaining facts. The Disabilities Teacher develops the worksheets and decides which ones to give to which students. Worksheets, like all other written materials are read aloud to the student(s).

Worksheets should be developed for specific student(s). For subsequent courses/students, teachers should not presume that a previously developed worksheet is still appropriate. **Worksheets can and should be modified!**

Examples of worksheets are presented in Appendix D. These are just 6 of the 28 worksheets developed on the topic “ Precision cuts”. For many students, it has also been necessary to have preliminary ones on measurement and on concepts like dice.

3. Feedback - Reinforcement

* to provide information to the student re his/her performance *

Students need information as to whether they understood/performed correctly or incorrectly.

(i) **Consequences for correct behaviour (responses) should be very different from consequences for incorrect behaviour (responses).**

e.g. The words used if a student answers/performs correctly should be different (and said in a different tone of voice) than those used if a student makes a mistake.

(ii) **specific**

e.g. Don't just say "Yes". Say what is correct "Yes brunoise means fine dice"

(iii) **clearly positive (for corrects)**

e.g. Use an enthusiastic happy tone of voice

(iv) **age appropriate**

e.g. "Good you sliced thinly" not "Good boy / Good girl"
no gold stars, stickers, lollies etc

(v) **Check the effect of feedback!**

- Do not presume that praise is always effective in increasing correct responses.
- Some student's behaviour indicates that they do not like positive comments.
- Other student's behaviour indicates that correction / negative feedback may be perceived by them as positive because it provides attention.

(vi) **Do not overlook errors because of the student's disability**

- When a student makes a mistake **correct him/her.**
- **Students learn what is correct and incorrect by the consequences delivered.**

(vii) **Data can be used to provide feedback:**

- to the student about his/her performance
- to the teacher re the effectiveness of the instruction

At Petersham TAFE the disabilities teacher and the teacher/consultant analyse the data and use it as a basis for modification.

4. Pacing

* to prevent inappropriate behaviour *

Employers do not want employees who sit and wait!

- (i) Students should not learn to sit and wait:
for:
- instruction
 - prompts
 - reinforcement (feedback)

Downtime can lead to inappropriate behaviour!

- (ii) Classes should be planned to include:
- a variety of activities for short periods each
 - repeated practices
 - a combination of practical and theory

A total theory class would be overwhelming. Schedule classes so that these are brief theory sessions interspersed with practical activities.

In customised courses, the Disabilities Teacher is responsible for determining how to ensure that all students are working so that there is limited down time.

- (iii) **Individual instruction must occur without other students waiting (for their turn etc)**

Students need work to go on with while the teacher is working with another student.

- (iv) **The pace needed for a practical task should be built into the training from the beginning**

This will stop the student becoming confused about acceptable rate.

- (v) **As the student(s) competency develops, gradually increase the length of time of repeated practice of a task until it approximates industry requirements**

For example kitchen attendants peel large bags of carrots not just 10 carrots. Initial instruction, allows for 10 carrots before moving onto the next activity. Latter classes, should allow for increased length of time and increased number of carrots.

- (vi) **As the time scheduled for a task increases, the number of items completed should also increase to the level of productivity in the real environment.**

5. Task Analysis (TA)

- * a breakdown of the task into specific steps *

Why?

- identifies the specific steps
- trainer learns the job/task through doing the TA
- the data it generates is used
 - as a basis of instruction
 - as a motivator for students

The Disabilities Teacher decides when to do task analysis. A danger of doing them is that they focus on steps rather than the task as a whole. A teacher taking data on each individual step can also stigmatise the student.

(i) Rules for Task Analysis

- Do the task yourself a couple of times
- Determine the easiest way to do the task
- Write down the steps
- Get the student to do the task - to find out what they already know
- Respect the individual's method of accomplishing the task if this method would be acceptable in the workplace. If it results in slow pace then intervene
- Only teach steps the student cannot do independently
- Provide feedback on teaching steps
- Record performance – a step has not been done correctly if the trainer has to provide any assistance!

(ii) Incorrect responses should be blocked or corrected

Block errors by:

- Stopping student immediately
- Reorient the student to the cue - returning to end of previous step
- Repeating the step with enough assistance to achieve correct response and then give positive
- Repeat the step again only reduce level of assistance and give even stronger positive

(iii) Analyse the errors – Does the student not know: What? How? When?

Examples of TAs are given in Appendix E. Further examples will be presented at the conference.

(iv) Provide more practice on tasks in which student is making errors

Correction can be reinforcing for some students. If this appears to be the case try to make **the motivation for doing the task correctly more powerful than the attention received from doing it wrong.**

Remember these TAs were developed for a specific student in a specific situation. If doing similar task in a different environment or with a different student, the trainer must re do the TA as the steps may be different

6. Providing Assistance

(i) Highlight Natural Cues

Natural cues tell us

- **When to do something** e.g. dishwasher full of dirty dishes turn on
dishwasher full of clean dishes – take out
- **When to stop** e.g. sink full of water – stop turning tap
- **Which choice to make** e.g. Green light → go red light → stop

Some students with intellectual disabilities do not attend to the natural cues and it is necessary for the teacher to highlight cues.

Some highlights used at Petersham include:

- colour dots beside the knob and corresponding element on stove top
- colour dots on home keys of computer and corresponding colour dots on fingers
- timer to indicate when pies are to come out of oven
- mark on scale to indicate correct weight
- arrows on filing shelves to indicate direction

In deciding on whether to introduce such highlights the Disabilities Teacher has to determine whether they are appropriate for a workplace. **If the highlights are not appropriate in a workplace and/or if utilisation of them would stigmatise the student, then the Disabilities Teacher has to have a plan for fading them out.**

Some examples are include in Appendix F

(ii) *Teacher Assistance - Prompts*

- | | |
|----------------------------|---|
| verbal cues | - tell the student what to do |
| physical prompts | - pointing, gesturing or touching |
| modeling | - demonstrate correct performance |
| physical assistance | - move the student's body through the movements |

Do not give more assistance than necessary!

Use the student's previous performance to determine the method and amount of assistance

Most commonly at Petersham the levels of assistance are provided in the following order:

After asking student to do the task – (may be a written / pictorial instruction)

If student doesn't do a step	→	verbal prompt – wait and see
If still doesn't do step	→	gesture/point – wait and see
If still doesn't do step	→	model /demo – wait and see
If still doesn't do step	→	physically guide

The wait would never be more than 3 seconds.

Provide assistance without being intrusive or drawing attention to the student e.g. not loud.

Levels of assistance need to be faded. Students who continue to need these levels of assistance will not obtain and maintain employment.

If a student is not progressing and continues to require the same amount of assistance it is necessary for the Disabilities Teacher to modify instruction.

Some suggested modifications:

- break down the step into smaller steps
- practice the step separately in isolated trials
- change consequences to increase motivation

(iii) *Other less intrusive assistance*

match to sample - trainer gives a correct sample for the student to match
eg, provide a carrot sliced in the size and shape required

picture cues - picture checklist to which the student can refer
eg, picture of each ingredient needed for salad

7. Accuracy Data

Managers want employees to be accurate!

Particularly in the customised courses, if a task involves repeated practice, then the Disabilities Teacher may decide to set up accuracy data.

Task analysis sheets provide accuracy data on the number of the steps done correctly for any practical task.

Other tasks, e.g. filing can also have accuracy data (graph showing number correct / number incorrect).

Accuracy data provides:

- **an objective record of student performance**
- **a basis for modifying instruction**
- **a pictorial representation i.e. shows how they are going.**

Examples of accuracy data done at Petersham TAFE are in Appendix G. The Disabilities Teacher and / or the Teacher / Consultant can look at this data and determine the effectiveness of training. Errors are recorded in pink and corrects are recorded in green. The aim is for the green to go up to the line (usually 100%).

It is necessary to examine actual examples to give specific interpretations of data.

General guidelines are:

If the number of corrects

- stays flat or increases and then flattens
- up and down fluctuations but overall up
- goes up then drops down

Then

- intensive instruction needed
- more practice needed
- increase consequences

8. Rate Data

Managers want employees to be fast – not just accurate!

Like accuracy data, **rate data provides**

- an objective record of student performance
- a basis for modifying instruction
- a pictorial representation i.e. shows how they are going.

Examples of rate data are included in Appendix H The green is the regular rate (acceptable rate of co-workers) – the dark horizontal line indicates this as well. The pink is the additional time it took the student to do the task. Students at Petersham TAFE learn that they need to get less and less pink. The aim is for the pink to get closer to line.

The guidelines for accuracy data also apply to rate data.

At Petersham TAFE, accuracy is concentrated on prior to rate. Rate becomes a major focus when TA or accuracy data indicates the student is firm on how to do the task.

Rate should be built into the training from the beginning so that the student does not learn that slow pace is acceptable.

Ways to increase rate:

- **Verbal** **tell to go faster, keep working**
- **Model** **work alongside trainer or coworker who is fast**
- **Check Accuracy** **make sure student is not adding additional steps or pauses**
- **Motivate** **change consequences for going faster or for not going faster**

If the student adds pauses or extra steps during training – it should be treated as incorrect.

Critical Components of Good Data

- measures what you want to measure
- allows decision making - don't just take it – use it
- efficient – doesn't take a lot of time and interfere with the task chain
- non stigmatising – non intrusive – does not draw attention to student

9. Behaviour Management Strategies

Managers do not want employees who cause problems or are difficult to deal with.

People with intellectual disabilities may have difficulty obtaining and maintaining employment not because of practical skills but because of other work related behaviours that are unacceptable to managers.

The preceding reasonable adjustments have focused on increasing positive skill performance. Unfortunately some students with intellectual disabilities have inappropriate learned behaviours that may affect their work performance. During training it is necessary to decrease these behaviours.

Intervention depends on the:

- behaviour
- student
- situation - is it likely to occur in a typical workplace setting?
- intensity - is it likely to draw negative attention to the student?
- frequency - does it occur often to draw attention to the student at work?

A thorough discussion of behaviour modification is beyond the scope of this paper.

Some strategies that have been tried at Petersham include:

- Telling the student it is inappropriate in a workplace and why
- Reinforcing alternate appropriate behaviours
- Recording data on behaviour
- Developing behavioural contracts
- Student self management
- Seeking supports from other services

Usually if the teachers believe that a specific behaviour is interfering with a student's learning, then the T/C is consulted, data is taken and a strategy decided upon.

The book "Standards of Work Performance" (Riches, V., 1993) is often consulted as a resource when trying to determine an appropriate strategy

Workfit Data

All students attending workplace training have data collected on general work related behaviours. Managers consider these to be as important as practical skill performance.

The Workfit form developed by Viv Riches for recording data on these, is the basis of the form used at Petersham (see Appendix I).

This form is introduced at TAFE prior to worksite training. The importance of having good data on this (and not only being good at practical skills) is also stressed with the student and advocates.

It includes items managers consider important in the workplace

- Punctuality and Attendance
- Dress and Hygiene
- Reaction to Supervision
- Getting on with Co-workers
- Concentration
- Workplace
- Safety
- Behaviour regulation
- Communication
- Memory Performance

If an inappropriate behaviour is identified on Workfit, more frequent data collection will be started on the specific behaviour (see for example, cover sheet B)

10. Longer Duration And Lower Student :Teacher Ratio

As students with intellectual disabilities are considered to be slow learners, most people would probably put these reasonable adjustments first. They are however being dealt with last because they present the most difficulty for TAFE managers and thus for the presenters. **The difficulty is cost.**

At Petersham TAFE, some students with intellectual disabilities in mainstream courses do fewer modules per semester and thus take longer to complete a course. While this flexibility is needed, it can present difficulty. It results in fewer students enrolled in a module. Therefore, it generates less Actual Student Contact Hours (ASCH) and less funding.

Tutorials, which are necessary for many students with intellectual disabilities, are expensive and also do not generate much ASCH.

Customised courses at Petersham TAFE involve mainstream modules but the content is taught using the reasonable adjustments presented above. The intensity of support and the need for repeated practice means that students require approximately four times the mainstream hours to achieve the necessary competency.

A variety of schedules have been utilised. A more intensive course appears to be more successful than a less intensive course. Scheduling more hours per week for a shorter number of weeks appears to be more successful than fewer hours per week for a longer number of weeks. At Petersham TAFE, students in the less intense courses have remained as students for longer and appeared to have more difficulty adjusting to the role of worker in a real workplace.

For this reason, customised courses at Petersham vary but generally are 4-5 days per week for 2-3 terms. Practical skills' training is scheduled more than once a week to allow for repeated practice through the week.

If the students are to succeed it is necessary for the reasonable adjustments to be provided in such an intensive way.

Because the reasonable adjustments are delivered in such a short duration and because of the need for individual instruction, the student teacher ratio for most customised modules is 6-8 students with one industry teacher and one Disabilities Teacher. Managers see this as expensive. It is a ratio continually under threat.

It is however less expensive than to provide the same students with the similar reasonable adjustments individually in mainstream courses.

It is also less expensive than to provide reasonable adjustments to students with other disabilities enrolled in longer (multi year) courses.

It is less expensive than to provide income support (e.g. the Disability Support Allowance) to a person with an intellectual disability for the rest of his / her life (which would be the case if they remained long term unemployed).

On completion of a customised course at Petersham students are expected, with the assistance of a support agency, to obtain and maintain employment. Students are not generally accepted for another course. The aim is to intensively train students for work not to perpetually train. For each individual it is not an ongoing cost.

11. Assessment Event Modification

Like other students with disabilities at TAFE people with intellectual disabilities can receive assessment / exam modifications. TAFE has a policy specifically for this (00.10.G5 TAFE Gazette 5 April 2000).

The Disabilities Teacher reviews the regular assessment events (information on these is obtained from the industry teacher). If the Disabilities Teacher believes that the student requires modifications, the Teacher / Consultant is notified and modifications are determined. The Teacher / Consultant then meets with the Head Teacher for the industry section and explains the requirements for modifications and suggestions for alternatives.

It is important the assessment events actually assess what they are meant to assess, e.g. are not testing reading.

Examples of modifications include:

- a reader / writer for theory tests
- a rewritten test (T/C rewrites it into plain clear English)
- a practical test rather than written questions, e.g. student to demonstrate understanding of filing by doing it

FADING SUPPORT

Training is successful when the student performs independently at the level required in industry and using information naturally available in the work setting.

The teacher needs to gradually decrease the amount and specific nature of the information provided. This should begin as soon as the student is performing correctly

The Disabilities Teacher should have a plan to systematically fade:

- Assistance – highlights and prompts:
- Feedback – consequences – reinforcement
- Teacher Presence

(i) **Fading Assistance**

Employees need to respond to natural cues. As workers they will not be given lots of prompts.

- Highlights that are not appropriate for a workplace need to be faded out!

e.g. colour dots on fingers make smaller and smaller gradually
decrease the number of dots starting with
the home keys

- move toward less intrusive prompt i.e. if responding to model – give verbal be less specific, i.e. move from direct verbal to indirect

(ii) **Fading Feedback**

Most employers provide little positive feedback to employees. Employees need to work without regular feedback!

Therefore feedback needs to be gradually decreased

Suggestions for fading feedback:

- move to intermittent schedule – stop giving feedback on every trial
- give less info - do not be as specific in terms of step
- give feedback for rate rather than for correct performance
- use data for whole task as source of feedback rather than reinforce individual steps

(iii) **Fading Presence**

Employers want workers who work independently!

Too costly to have continual trainer present.

Trainers should fade distance and time

Student Progress

- learning - initial training
- able to perform steps
- still doing correct
- correct & getting faster
- performing at regular rate

Trainer Presence

- next to student and intervenes
- moves away – watches – intervenes if necessary
- focus on rate further away but able to time
- away – records time or has student record
- only spot check – not recording each time

(iv) **Task Maps**

Often students with intellectual disabilities have learned to wait for feedback before going onto next activity. If this occurs, explain once (briefly and clearly) the need to keep on working and reinforce for “getting on with work ” without waiting.

In customised courses, after initial training and when student(s) are able to perform many steps of some tasks, the Disabilities Teacher introduces a **Task Map. This lists the tasks in the order the student is supposed to do them** (each student’s is individual with different skills in a different order).

The student is expected to finish each task and move onto the subsequent tasks in order without having been told to by the teacher. The teacher may still intervene and continue training a task but will not tell the student what to do next.

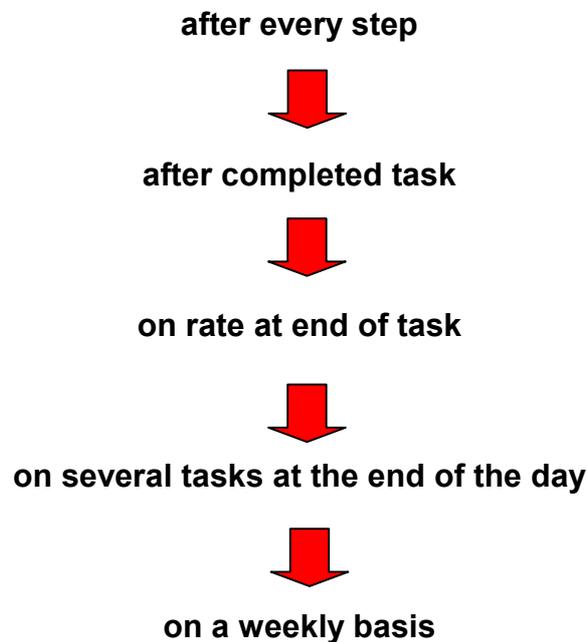
The student is to follow the map without waiting for feedback on performance or information as what to do next.

As the student progresses, the teacher will not intervene during the task but will correct completed work at another time – not immediately after student does it.

Data is recorded beside each task on the task map as to how the student performed. Examples are given in Appendix J.

In the first week after introduction, the Disabilities Teacher at the end of each class reviews the student's data. Then the Task Maps, along with the Accuracy Data and the Rate Data, are reviewed with the student on a weekly basis by the Teacher / Consultant to determine progress. The data is also available to the student to look at any time during or after class.

In this way, **feedback has moved from being given:**



Students continue to get immediate feedback on new task performance and on tasks involving intensive intervention by the trainer.

TRAINING IN INDUSTRY

Depending on the student, all of the above reasonable adjustments can also be important in workplace training.

Training in the workplace, however, can be more difficult than the classroom because it is not a closed space. Teachers in workplaces can not close the door. Reasonable adjustments and teaching strategies are more easily observed.

(i) **General teaching guidelines are even more important in the workplace**

1. **Be professional**
Coworkers and employers impression of the teacher may effect their impression of the student
2. **Be a positive role model**
e.g. be on time, appropriately dressed
3. **Be prepared**
Decide beforehand how to teach skills, know how to use equipment etc – it is confusing to the student if in the middle of instruction you change the way you do it
4. **Teach for independent learning – Teach like you won't be there tomorrow**
If the student is to be independent you will need to fade out e.g. have coworkers and manager talk directly to the student rather than give instruction / feedback to teacher
5. **Make rules that you can enforce**
If you can't enforce it don't say it or it may cause unnecessary friction in the workplace.
6. **Only provide the student with a choice, if there is a choice**
7. **Make the student responsible for his / her own behaviour**
e.g. if he/she drops files/sugar he /she should pick up
8. **Provide correction – not harsh criticism**
Not loud as it can be embarrassing for student
9. **Treat the student as an adult**
Age appropriate positive language
model appropriate language for coworkers
10. **Expect adult behaviour**
intervene if behaviour is inappropriate for the workplace.

(ii) **Workplace Development**

The aim is to secure a commercial worksite as a training venue for one student. Places with a positive corporate image are targeted.

Process

- Cold canvass – phone call
- Phone again
- Visits and discuss program with manager

If interested

- fax brief details
- set up an appoint
- arrange job analysis

The managers are informed about:

- the industry training program
- people with intellectual disabilities
- the type of training that will occur e.g. data etc
- the teachers responsibilities
- employer benefits
- employer responsibilities
- coworker benefits
- coworker responsibilities
- legalities

Examples of information sent to managers about the program are in Appendix K.

Finding appropriate training sites is one of the most difficult tasks for the Petersham teachers. It is very time consuming and can be very discouraging. Training sites, which have proved successful, are therefore used again.

Worksites are used strictly for training and are not expected to hire the student however, approximately 1 in 5 into paid employment. Such sites are not used again.

(iii) **Job Analysis**

The workplace teacher spends a few days at the worksite before the student begins to become familiar with the site, the tasks, and the staff.

Purpose - the workplace teacher needs to:

- Obtain specific info about the job tasks
- Know how to do the job tasks
- Know the sequence of tasks
- Understand the workplace culture
- Identify possible co worker support
- Consults the manager re workplace rules, regulations, conditions etc
- Develop an initial routine for the student

Process - during the job analysis, the worksite teacher:

1. talks to the workplace manager about tasks/jobs he/she expects the student to do (see Appendix L for a list of things to discuss with the manager)
2. observes the co-workers doing the tasks suggested by manager (see Appendix L)
3. seeks other tasks that may be possible for the student to do
4. practices each of the tasks the student may have to do
5. writes TAs for the tasks the student may have to do
6. observes social interactions at the workplace
7. completes a Job Analysis Worksheet - an outline of a student's typical day. (Examples of these are in Appendix M)
8. completes a Job Analysis Checklist. (Examples of these are in Appendix N)
9. shows the job analysis worksheet to the manager to ensure that he/she agrees
10. gives the job analysis worksheet, checklist and TAs to the Course Coordinator and the Teacher / Consultant

It is important that the teacher identify a variety of tasks and not just the easy tasks. The teacher should not prejudge the student's abilities. If concerned about level of difficulty of some of tasks, these should be discussed with the Teacher / Consultant before accepting.

It is also important the teacher identify the level of feedback in the workplace (which is usually not much). The student needs to be informed and prepared for minimal feedback.

The Teacher / Consultant and the Disabilities Teacher attempt to match a student to the site.

(iv) **Reasonable Adjustments During Training**

The reasonable adjustments done at TAFE also apply at worksite. The worksite teacher however must be even more conscious of possible obtrusiveness and stigmatisation.

The student should have already mastered most of the skills at TAFE so that the instruction should not be as intensive. It is necessary however to ensure that the student can transfer these skills to the workplace

Task Maps

All worksite students will have Task Map data. The tasks are taken from the job analysis.

Cover sheet B is for data on specific behaviours that need to be recorded on at least daily.

Task Analysis

TA data is collected if the student has difficulty doing tasks at workplace.

The task analysis may be different at the workplace than at TAFE (equipment may differ and the way a task is done may differ). It is suggested that the workplace teacher have the student do tasks the way the coworkers do them (as less stigmatising) unless the way the student was shown at TAFE is easier and safer. If so, workplace teacher needs to explain to the manager the TAFE way and why it is preferred.

Accuracy Data and Rate Data

These provide feedback for the student who will be given less feedback at work. Rate data should be for brief periods so that it is done quickly and can be continued when teacher fading out.

Workfit Data

Done weekly on all students during workplace training. The areas measured are similar to those on the manager's evaluation. The teacher should not just complete these but should use them as the basis for decisions.

Review of Data

When the student returns to TAFE for off the job training, the Disabilities Teacher in the class and the T/C review all the data and will make suggestions to the industry teacher.

There needs to be a balance between the usefulness of data and the intrusiveness of data collection. Worksite data should be collected quickly and easily without drawing attention to the student (e.g. do not use clipboard and stopwatch hung around neck). Simple non-attention drawing procedures (e.g. like moving paper clips from one pocket to another) should be used for counting.

Fading

Fading at worksites is extremely important! By the end of the work placement the student should be working independently with only a weekly spot check.

As the student's performance improves the teacher should fade out – first from being at the students side, then from the worksite. At the same time as the student's hours increase to approximate a full shift, the teachers hours decrease gradually to nil. This should not be an abrupt loss of teacher support but a planned withdrawal.

Teachers are only paid for hours attending. As they do an effective job in training the student to work independently their hours of attendance decrease thus their hours of pay decrease.

CONCLUSION

There are many facets to training people with intellectual disabilities in vocational skills.

The reasonable adjustments necessary vary with the student and the vocational area.

All students with intellectual disabilities require clear and precise information. Strategies for providing clear information vary. The only way to tell if information is clear is to check if the student understands it. It is not clear until the student does understand it.

In determining other reasonable adjustments, a major consideration is whether they are appropriate in industry. It is the Disabilities Teacher who decides when and how to introduce appropriate reasonable adjustments. If they are not appropriate in industry but are necessary for the initial training, the Disabilities Teacher should have a systematic plan for their introduction and a systematic plan for their removal.

The teacher must balance the need for the support with the need for the student to perform independently.

Customised courses at Sydney Institute - Petersham TAFE have resulted in over 70% of students gaining employment. This is because of the systematic instruction provided in these courses.

Regardless of student, course, vocational area and reasonable adjustment requirements, what all students with intellectual disabilities need is good teaching.

The knowledge, skills and expertise of a Disabilities Teacher can not be replaced.

BIBLIOGRAPHY

For more information, the presenters suggest the following sources:

Australian National Training Authority (ANTA) Bridging Pathways from 2000 until 2005
Australian National Training Authority 1 July 2000

Australian National Training Authority (ANTA) ResponseAbility People with Disabilities: Skilling staff in vocational education, training and employment sectors. Module RES027 Learning Materials pg 272-290 National Staff Development Committee 1994

Jobsupport Inc Achieving Employment for people with an intellectual disability. (video)
Canberra ACT: Department of Health, Housing, Local Government and Community Services, 1993

Specialised Training Program, University of Oregon
Planning and Presentation Modules for Training in Supported Employment

- Inservice Preparation and Presentation
- Disabilities Awareness
- Job Development and Marketing
- Job Analysis
- Task Design and Task Analysis
- Precision Training
- Self Management
- Positive Behavioural Supports

Eugene Oregon: University of Oregon, 1992

Mank D. M. and Horner R. H.

“Instructional Programming in Vocational Education”. In R. Gaylord-Ross (Ed),
Vocational education for persons with special needs.
Palo Alto California: Mayfield Publishing, p142-172

Mcloughlin C.S., Garner J.B., Callahan M.

“Getting Employed Staying Employed”
Baltimore Maryland: Paul H Brookes, 1987

Lewis G.M., Robertson S.K., Lawn R.W., Roberts S.L.

“Finding A Job Keeping A Job”
West Perth WA: Proem Publications, 1989

Riches V.C.

“Standards of Work Performance”
Artarmon NSW: MacLennan and Petty, 1993

TAFE NSW Commission “00.10.G5 Policy – Reasonable Adjustment Procedures for Students with Disabilities Undertaking Assessments” in TAFE Commission Gazette No 12 of 2000, 5 April 2000, pg 7.