Potential outcome measures for Training Opportunities participants: Technical Report

MAY 2010



MINISTRY OF SOCIAL DEVELOPMENT Te Manatū Whakahiato Ora PREPARED BY Centre for Social Research and Evaluation

CENTRE FOR SOCIAL RESEARCH AND EVALUATION

ACKNOWLEDGEMENTS	Thanks to the following for their helpful comments and suggestions of previous versions of this paper: Colleen Souness, Jane Wang, Jared Forbes.
DISCLAIMER	The views and interpretations in this report are those of the research and are not the official position of the Ministry of Social Development
	Readers should note that this report was prepared for internal use or and has not been through the Ministry's full publication quality assurance process. MSD is publishing this research as it may be of value and interest to the social services research community and others. The report has been edited and proof read, but the layout and content has not been reviewed or updated since the report was finalised.
SUGGESTED CITATION	CSRE (2010) Potential outcome measures for Training Opportunities participants, Centre for Social Research and Evaluation, Ministry of Social Development, Wellington.
PUBLISHED	This report was completed in May 2010, and published in the MSD Research Archive website in September 2019.
ISBN	Online 978-0-9951242-5-7

Contents

SUMMARY	2
Introduction	
Findings	2
Background	

ANALYSIS	4
ncludes all participant starts	4
Training Opportunities participant outcomes	4
Benefit status at monthly intervals	7
Comparison of TEC and MSD outcome measures	9
MSD outcomes two months after course completion	10

TECHNICAL NOTES	.12
TEC participants	.12
TEC outcome measure	.13
MSD and TEC outcomes at two months after course completion	.15
MSD two-month outcomes	.16
Off-benefit outcomes	.17
Sustainable employment outcome measure	.18
References	.19

Summary

Introduction

The primary aim of Training Opportunities is to provide participants with skills and qualifications to enable them to move into full-time employment. The purpose of this report is to present potential outcome measures for Training Opportunities using Ministry of Social Development (MSD) administrative data. We also compare participants' outcomes between Tertiary Education Commission (TEC) and MSD information.

Findings

The analysis shows the outcomes we can report using matched TEC and MSD data. The figures contained in the report are intended to illustrate potential outcome measures. In addition, participant outcome information is, on its own, descriptive only and does not demonstrate its effectiveness.

MEASURES OF PARTICIPANT OUTCOMES WITHIN THREE MONTHS OF COURSE COMPLETION USING MSD ADMINISTRATIVE DATA

The following measures look at the outcomes achieved by participants within three months of completing their Training Opportunities course using MSD administrative data.

Benefit exits and employment outcomes

The primary outcome for Training Opportunities is employment. We have two possible measures of employment outcomes: benefit exits and sustained employment exits. In all cases, the outcomes for the most recent Training Opportunities participants (the 12 months to July 2009) are lower than those for the previous year and are likely due to the economic downturn. However, looking at trends in monthly outcomes indicates an increase in off-benefit outcomes from the low point in December 2008.

Benefit exits

Of those participants who completed a Training Opportunities course in the 12 months to July 2009, 29 percent exited benefit' within three months. For those exits that we can observe six- and 12-month outcomes for, 65 percent remained off benefit for at least six months and 45 percent for 12 months.

Sustained employment exits

Using the MSD sustainable employment outcome measure², 16 percent exited benefit to work within three months, and of these 55 percent remained in work for at least six months, falling to 41 percent for those lasting 12 months. The difference in the proportion of benefit exits and work exits is in part because people do not always tell Work and Income they are leaving benefit for work.

¹ Excludes exits to prison or where a person has died.

² Only includes benefit exits for reason of work and follows people until they either return to benefit or begin tertiary study (as indicated by the use of student loans or allowances).

Part-time work while on benefit

Besides moving off benefit, 8 percent of participants increased their earnings from part-time work while on benefit.

Further education, training and employment assistance outcomes

A secondary outcome from Training Opportunities is participants moving into further study or employment assistance. Over 12 percent of participants entered tertiary study in 2009, with larger proportions moving into further MSD employment programmes or returning to Training Opportunities (18 percent and 34 percent respectively).

Just under half of participants achieved positive outcomes after completing a Training Opportunities course

When we combine positive outcomes (exit benefit, part-time work, tertiary study or further MSD programmes), 49 percent of participants achieved at least one positive outcome within three months of completing their course (for course completions in the 12 months to July 2009).

PARTICIPANT OUTCOMES AT EXACTLY TWO MONTHS AFTER COURSE COMPLETION: COMPARING TEC AND MSD MEASURES

We compared the TEC reported outcomes of Training Opportunities participants at exactly two months after completing their course to MSD administrative data. Overall, the two information sources were broadly consistent for the proportion in work (see Table 1). TEC under-reported the number participating in tertiary study and MSD programmes, and reports a higher proportion of participants whose outcomes are unknown; on the other hand, MSD under-reported the number participating in further Training Opportunities and further progressive training. The difference in outcomes is primarily because of differences in administrative information available to each organisation. Specifically, MSD has employment, income support and student assistance information, while TEC has accurate information on its funded training programmes.

TABLE 1: COMPARISON OF TEC AND MSD OUTCOMES AT TWO MONTHS AFTER FINISHING A TRAINING OPPORTUNITIES COURSE (COURSE COMPLETIONS TO DECEMBER 2008)					
TEC outcomes MSD outcomes					
Measure % % Measure					
Work (full- and part-time work)	31%	33%	Off benefit or part-time work		
Tertiary study	3.7%	7.5%	Tertiary study		
Progressive training	10.5%				
Further Training Opportunities	26%	13%	Further Training Opportunities		
Work and Income programmes	0.2%	15%	Work and Income programmes		
Inactive	19%	31%	Inactive		
Unknown	9.6%	1%	Unknown		
	100%	100%			

Source: TEC and MSD, 2009, research results, not official TEC or MSD statistics.

Background

The motivation for this analysis is to provide more detail on the outcomes of participants in Training Opportunities. TEC currently reports on participants' outcomes two months after course completion. We are interested in expanding on this by providing information on:

- whether employment outcomes are sustained
- how many participants remain off benefit
- what else participants are doing when they complete their Training Opportunities course.

Analysis

The following analysis uses TEC-supplied data on Training Opportunities participation spells that ended between December 2004 and July 2009. For these participants we have developed two sets of measures. The first provides information on outcomes achieved by participants within three months of completing their Training Opportunities course, using MSD data. The second set of measures looks at participant outcomes exactly two months after course completion, and compares MSD- and TEC-based measures. The purpose of comparing MSD and TEC measures is to check the consistency between the two organisations' measures.

Includes all participant starts

The current analysis has not separated those who completed their training course from those who exited early from the course. It may be that if a completion measure is used (eg 80 percent of participants complete their training) then we may restrict outcome measures to only those who complete the programme.

PARTICIPANT OUTCOMES ALONE DO NOT PROVIDE MEASURE OF PERFORMANCE

Participants' outcomes by themselves do not provide any indication of programme performance (ie its impact). To be able to find out the difference that Training Opportunities makes to participants' outcomes you need to know what outcomes participants would have achieved without the programme (referred to as the counterfactual). For programmes such as Training Opportunities the counterfactual is usually based on the outcomes of a comparison group who have the same characteristics as the participants. The impact of Training Opportunities is the difference in outcomes between the participants and the comparison group.

Although not covered in this report, MSD has analysed the impact of Training Opportunities since 2000 (ie constructed matched comparison groups using administrative information). Further, we are able to provide information on the impacts of Training Opportunities when producing the outcome information for participants. The inclusion of impact information provides a basis on which to judge the programme's performance.

Training Opportunities participant outcomes

The MSD-derived outcome measures for Training Opportunities participants covers the period from when participants start a Training Opportunities course to three months after completing the course. TEC provided MSD with participant placement information, and we have been able to match around 97 percent of these records to MSD outcome measures.

BENEFIT AND WORK OUTCOMES

The primary aim of Training Opportunities is to provide participants with skills and qualifications to enable them to move into full-time employment. Our employment outcome first measure is the proportion of participants who exit benefit (excluding exits to prison or where a person has died). For the 12 months to July 2009, 29 percent of Training Opportunities participants exited benefit within three months of completing a course (Table 2). Of those who did exit, 65 percent remained off benefit for at least six months while 45 percent did not return to benefit within 12 months. The second employment measure includes only recorded exits to work. For the 12 months to July 2009, 16 percent of participants exited benefit to work. Of these exits, 55 percent lasted longer than six months,

with 41 percent lasting at least 12 months. In all cases these outcomes are lower than what was achieved in the 12 months to July 2008 (Table 2). The difference in outcomes is most likely a result of the economic downturn over this period.

IABLE 2: BENE	FIT AND WORK O	UTCOMES WITHIN I	HREE	
MONTHS OF COMPLETING A TRAINING OPPORTUNITIES				
COUF	RSE			
		For the 1	2 months ending	
		July 2009	July 2008	
Benefit exits ^a		29%	35%	
Proportion of exits	six months	65%	71%	
lasting at least	12 months	45%	50%	
Benefit exit to work ^b		16%	22%	
Proportion of exits	six months	55%	65%	
lasting at least	12 months	41%	47%	
Part-time work ^c		8%	9%	
Benefit to work or part	-time work	22%	29%	
Off benefit or part-time	e work	35%	41%	
Course completions ^d 18,453 18,393				

a: Exits from main benefit that occur between course start date and three months after course end date. The measure excludes exits to prison or where a person has died.

b: Benefit to work exits is based on the official MSD measure of sustainable employment outcomes.

c: Based on declared earnings from work. If a person was in part-time work before starting their Training Opportunities course, we only count a part-time work outcome if their earnings from work subsequently increase.

d: Training Opportunities courses completed in the 12 months to July of the reference year. If a participant has no social welfare number they are excluded from analysis (affected 3.2 percent of course completions in 2009).

Source: TEC and MSD, 2009, research results, not official TEC or MSD statistics.

The lower proportion of participants exiting benefit to work compared to all benefit exits reflects that people leave benefit for other reasons (eg leave the labour market or take up study). However, we also know that clients do not always tell Work and Income why they have left benefit and therefore administrative data underestimates the true number of benefit-to-work exits.³

As well as benefit exits we examined where participants increased their earnings from part-time work while on benefit. For the 12 months to July 2009, 8 percent of participants either started part-time work or increased their earnings from work within three months of completing their Training Opportunities course. Note we can only measure part-time work while a person is receiving a main benefit.

Combining work outcomes, we conclude that 22 percent of participants ending a placement in the 12 months to July 2009 either exited benefit to work or gained part-time work. If we use the broader benefit exit measure, then 35 percent⁴ either exited benefit or gained part-time work within three months of course completion.

FURTHER EDUCATION, TRAINING OR EMPLOYMENT ASSISTANCE OUTCOMES

A secondary outcome for Training Opportunities is progression to further education, training or employment assistance (Table 3). In the 12 months to July 2009, 12 percent of participants enrolled with a tertiary institution within three months of completing a Training Opportunities course. A further

³ An analysis of linked MSD and Inland Revenue data indicates that a high proportion of clients who exit benefit with a non-work reason have PAYE earnings in the immediate period after exiting benefit (Statistics New Zealand 2008).

⁴ This number is less than the sum of benefit exits and part-time work as some participants achieved both outcomes and are counted only once in the overall figure of 35 percent.

18 percent of participants moved on to further MSD employment programmes, while 34 percent started another Training Opportunities course.⁵

TABLE 3: EDUCATION, TRAINING OR EMPLOYMENT ASSISTANCE OUTCOMES WITHIN THREE MONTHS OF COMPLETING A TRAINING OPPORTUNITIES COURSE			
		For the 12 m	onths ending
		July 2009	July 2008
Tertiary study ^a		12%	11%
Further MSD employment programmes ^b		18%	18%
Either tertiary stud	ly or further MSD employment assistance	28%	27%
Commence a Traini	ng Opportunities course	34%	35%
Course completions	c	18,453	18,393

a: Active student loan or allowance (can include cases where people are enrolled but have not commenced their study).

b: Participating in MSD programmes that indicate progression towards full-time employment (eg after Training Opportunities starting a work experience placement or job search programme).

c: Training Opportunities courses completed in the 12 months to July of the reference year. If a participant has no social welfare number they are excluded from the analysis (affected 3.2 percent of course completions in 2009).

Source: TEC and MSD, 2009, research results, not official TEC or MSD statistics.

TERTIARY PROVIDERS

For those participants in tertiary study, Table 4 summarises the providers they are enrolled with. Most participants are enrolled with private training establishments (58 percent in the year to July 2009) followed by polytechnics, universities and wānanga. For a small number of participants we could not identify the tertiary providers from the administrative data.

TABLE 4: PARTICIPATION I	N TERTIARY STUDY E	BY PROVIDER	
TYPE			
	For the 12 months endin		
Tertiary provider	July 2009	July 2008	
Private training establishment	58%	62%	
Polytechnic	30%	28%	
University	4.9%	3.4%	
Wānanga	2.8%	2.9%	
Not identified	3.9%	4.0%	
Participants in tertiary study ^a	963	859	

a: Active student loan or allowance (can include cases where people are enrolled but have not commenced their study).

Source: TEC and MSD, 2009, research results, not official TEC or MSD statistics.

COMBINED POSITIVE OUTCOMES

Table 5 summarises the positive outcomes achieved by participants within three months after completing a Training Opportunities course. For those who finished a Training Opportunities course in the year to July 2009, 49 percent achieved one positive outcome, down from 53 percent in the previous 12 months.

⁵ For this analysis we incorporated TEC records on Training Opportunities placements to ensure we included all subsequent Training Opportunities commencements (see page 12 for a discussion of the undercount of Training Opportunities placements in the MSD administrative data).

TABLE 5: POSITIVE OUTCOMES ACHIEVED WITHIN THREE MONTHS OF COMPLETING TRAINING OPPORTUNITIES

	For the 12 months ending		
Outcome	July 2009	July 2008	
Benefit exits ^a	29%	35%	
Part-time work ^b	7.9%	9.1%	
Employment	35%	41%	
Tertiary study ^c	12%	11%	
Further MSD employment programmes ^d	18%	18%	
Further study or training	28%	27%	
Positive outcomes ^e	49%	53%	
Course completions ^f	18,453	18,393	

a: Exits from main benefit that occur between course start date and three months after course end date. The measure excludes exits to prison or where a person has died.

b: Based on declared earnings from work. If a person was in part-time work before starting their Training Opportunities course, we only count a part-time work outcome if their earnings from work subsequently increase.

c: Active student loan or allowance (can include cases where people are enrolled but have not commenced their study).

d: Participating in MSD programmes that indicate progression towards full-time employment (eg after Training Opportunities starting a work experience placement or job search programme).

e: Participants who have exited benefit, increased part-time earnings on benefit, or entered tertiary study or further MSD programmes. f: Training Opportunities courses completed in the 12 months to July of the reference year. If a participant has no social welfare number they are excluded from the analysis (affected 3.2 percent of course completions in 2009).

Source: TEC and MSD, 2009, research results, not official TEC or MSD statistics.

Benefit status at monthly intervals

The purpose of this section is to show the trend in off-benefit outcomes (off benefit and benefit exits to work) achieved by Training Opportunities participants in the year after course completion. Figure 1 tracks the benefit status of participants in the 12 months after completing a Training Opportunities course and compares the outcomes of those who completed a Training Opportunities course in the 12 months to July 2008 with those who completed a course in the 12 months to July 2009. The graph clearly shows that the off-benefit outcomes of the most recent participants were considerably lower than those achieved by participants completing Training Opportunities in the previous 12 months.

Figure 2 shows the monthly trend in the proportion of participants off-benefit and exited benefit to work six months after they completed their course. The impact of the economic downturn can be seen in the downward trend after 2007. Of interest is that while December 2008 represents the low point in the series, we are seeing an upward trend over 2009. Again, this is consistent with the recent improvement in economic conditions.

FIGURE 1: PROPORTION OF PARTICIPANTS OFF MAIN BENEFIT AND EXITED BENEFIT TO WORK IN THE 12 MONTHS AFTER COMPLETING A TRAINING OPPORTUNITIES COURSE



Training Opportunities courses completed in the 12 months to July of the reference year. If participant has no social welfare number then they are excluded from the analysis (affected 3.2% of course completions in 2009). Source: Tertiary Education Commission and Ministry of Social Development, 2009, research results, not official TEC or MSD statistics.

FIGURE 2: PROPORTION OF PARTICIPANTS OFF MAIN BENEFIT AND EXITED BENEFIT TO WORK SIX MONTHS AFTER COMPLETING A TRAINING OPPORTUNITIES COURSE



Source: Tertiary Education Commission and Ministry of Social Development, 2009, research results, not official TEC or MSD statistics.

Comparison of TEC and MSD outcome measures

The following analysis compares the outcomes reported by TEC to MSD information for the same period. The TEC outcome measure for Training Opportunities involves providers finding out the outcomes of participants at two months after course completion. This measure is more restrictive than those developed in the previous section, as it excludes outcomes that do not occur exactly two months after course completion. The advantage of the measure is its simplicity, particularly for providers to administer.

TEC OUTCOMES TWO MONTHS AFTER COURSE COMPLETION

Table 6 shows the outcomes of participants two months after completing a Training Opportunities course based on provider follow-up with participants. These results do not exactly agree with the results reported by TEC; in particular, we include participants with 'unknown' outcomes. However, the proportions in the table agree with those reported by the Ministry of Education (Table 33, page 34. Ministry of Education 2009).

TABLE 6 :TEC OUTCOMES AT TWO	MONTHS AFTER		
PARTICIPANTS COMPLET			
OPPORTUNITIES COURSE			
	Cal	endar year	
TEC outcomes	2007	2008	
Working	33%	31%	
Employed full-time (aged 20+)	30%	27%	
Employed part-time (aged up to 20)	3.7%	4.3%	
Further training	13%	14%	
Other training	7.8%	8.9%	
Tertiary study	3.0%	3.7%	
Work-based training	1.9%	1.6%	
Return to Training Opportunities	26%	26%	
Other	27%	29%	
Work and Income programme	0.2%	0.2%	
Unemployed/Out of labour force	18%	19%	
Unknown	9.5%	9.6%	
Total of individual sub-categories	100%	100%	
Total observations ^a	18,362	18,870	
a Training Opportunition courses completed in the colonder year			

a: Training Opportunities courses completed in the calendar year.

Source: TEC, 2009, research results, not official TEC statistics.

MSD outcomes two months after course completion

Table 7 shows the outcomes of the same participants in Table 6 based on MSD administrative data. The table groups outcomes under several headings.

TABLE 7: MSD OUTCOMES AT TWO MONTHS AFTER				
PARTICIPANTS COMPLETE A	TRAINING			
OPPORTUNITIES COURSE				
	Caler	ndar year		
Outcome (MSD ranked outcome) ^a	2007	2008		
Employment outcomes	21%	18%		
Off benefit work	15%	12%		
On benefit part-time work	6.4%	6.0%		
Independent of Work and Income assistance	33%	30%		
Off benefit work	15%	12%		
Off benefit tertiary study	3.2%	3.4%		
Off benefit unknown destination	14%	14%		
Off benefit prison or died	0.4%	0.5%		
Tertiary study	6.9%	7.5%		
Off benefit tertiary study	3.2%	3.4%		
On benefit tertiary study	3.7%	4.1%		
Receiving Work and Income assistance	36%	28%		
Off benefit subsidised work	2.6%	2.2%		
Off benefit Work and Income programme	3.0%	2.4%		
On benefit Work and Income programme	11.5%	11%		
On benefit Training Opportunities	19%	13%		
Other outcomes	22%	32%		
Off benefit prison or died	0.4%	0.5%		
On benefit only	20%	30%		
Unknown outcome (no social welfare number)	1.3%	1.0%		
Total for individual sub-category outcomes	100%	100%		
Observations ^b	18,362	18,870		

a: Where a client has more than one outcome these are ranked according to rules set out in the technical notes.

b: Training Opportunities courses completed in the calendar year. If a participant has no social welfare number they are excluded from the analysis.

Source: TEC and MSD, 2009, research results, not official TEC or MSD statistics.

Employment outcomes: either recorded exit from benefit to work or the person is in part-time work while on benefit. One issue with this measure is we do not always record when a person moves into employment⁶; these people would fall into the 'off benefit unknown destination' group.

- Independent of Work and Income assistance: this measure is often used to evaluate the effectiveness of Work and Income programmes and looks at whether a person is receiving a main benefit or participating in any Work and Income programmes.
- **Tertiary study**: covers only instances where a person has an active student loan account or allowance or bursary.

⁶ An analysis of linked MSD and Inland Revenue data indicates that a high proportion of clients who exit from benefit with a non-work reason have PAYE earnings in the immediate period after exiting benefit (Statistics New Zealand 2008).

Receiving Work and Income assistance: includes instances where people are participating in Work and Income programmes or services (including Training Opportunities).

There are several differences between TEC and MSD outcomes. We briefly discuss each of these.

- Employment outcomes: the proportion of participants reported as working more than 20 hours is higher than the proportion of exited benefit to work (27 percent and 12 percent respectively in 2008). When we cross-referenced MSD and TEC outcomes for the same clients, some of this difference could be explained by participants:
 - having no work exit recorded when leaving benefit
 - who are on benefit in part-time work, or
 - who are receiving a wage subsidy.

Together these account for 35 percent of TEC full-time work outcomes. However, 31 percent of those reported as being in full-time work (20+) by TEC were recorded as being on main benefit two months after completing their Training Opportunities course.

- **Further training**: a high proportion of those in TEC further training are on main benefit at two months after completing their Training Opportunities course (from 65 percent of those in tertiary study to 70 percent in other training).
- Further Training Opportunities: of all outcomes, participation in further Training Opportunities courses has the highest consistency between MSD and TEC (48 percent).⁷ Because TEC has more accurate information on when people are participating in Training Opportunities, we assume the MSD measure underestimates the number of people in further Training Opportunities. However, 11 percent of those recorded in further Training Opportunities courses by TEC were not on main benefit.
- Work and Income programmes: TEC has limited information on participation in other Work and Income programmes and therefore under-reports this outcome.

⁷ The accordance between MSD and TEC Training Opportunities participation records has fallen over time. Prior to 2008 agreement was around 75 percent, but since 2008 it has fallen with the increased undercount in the MSD administrative data of Training Opportunities participation spells (see TEC and MSD Training Opportunities records, page 12).

Technical notes

This section provides more technical information on the selection of Training Opportunities participants and the construction of the various outcome measures.

TEC participants

TEC provided MSD with a dataset covering participation spells in Training Opportunities between June 2004 and September 2009. We selected all Training Opportunities participation spells that ended between January 2005 and December 2006.

TEC placement dataset:

- training_prog_code = 'TOP'
- course start date = date part of placement_start_date
- course end date = date part of placement_end_date

Match TEC placement with TEC trainee dataset on trainee_id to get JSR_number (SOLO client_id).

Match TEC placement dataset using SOLO client_id to obtain clients' social welfare numbers (swn).

TABLE 8: COURSE STARTS AND COMPLETIONS BY CALENDAR YEAR						
Training Opportunities course placements				% of commencemer		
Calendar year	Commencements	Completion	Current	No social welfare number	No JSR number ^a	
2004	6,415	6,332	0	1.7%	1.2%	
2005	18,595	18,645	0	2.0%	1.4%	
2006	18,882	18,841	0	1.8%	1.1%	
2007	18,410	18,362	0	1.3%	0.7%	
2008	18,789	18,870	0	1.0%	0.3%	
2009	15,440	8,946	6,535	15.8%	15.1%	

a: JSR number (also called SOLO client id) is provided by TEC and enables matching to MSD administrative data.

Source: TEC and MSD, 2009, Draft research results, not official TEC or MSD statistics.

Table 8 shows the number of course commencements and completions by calendar year based on the TEC records supplied for this analysis. If missing JSR numbers remain high it will not be as easy to match TEC records with MSD administrative data in the future.

TEC AND MSD TRAINING OPPORTUNITIES RECORDS

Figure 3 compares the number of Training Opportunities course commencements each month as recorded by TEC and MSD. Over the period MSD recorded around 80 percent of TEC Training Opportunities commencements. However, in 2006 and 2009 the proportion fell to 68 percent and 49 percent respectively. The undercount in the MSD administrative data reflects longstanding problems with reconciling TEC and MSD programme data. For example, the inconsistency between participation start dates means the proportion of MSD starts is greater than that recorded by TEC, shown in Figure 3 by the percentage of TEC starts exceeding 100 percent in November and December 2008. The recent switch to a manual reconciliation process appears to have decreased the consistency between the two sources.

FIGURE 3: MONTHLY TRAINING OPPORTUNITIES COMMENCEMENTS AS RECORDED BY MSD AND TEC



Source: Tertiary Education Commission and Ministry of Social Development, 2009, research results, not official TEC or MSD statistics.

TEC outcome measure

TEC outcomes were based on TEC-supplied datasets. Two-month labour market outcomes were identified using the following rules:

- 1. Select records where $typo_key = 5$.
- 2. Sort dataset by trainee_id course_id sequence_number.
- 3. Select the record with the highest sequence number.
- 4. Merge with TEC placements using trainee_id and course_id.

Conversions of TEC outcome codes are summarised in Table 9.

TABLE 9: CONVERSION OF TEC OUTCOME CODES FOR COURSE COMPLETIONS IN

2008			
High-level group	Group	Code	Observations
Employed full-time (aged 20+)	Employed 20-29 Hrs	EM3	924
	Employed 30-39 Hrs	EM4	1,131
	Employed 40 or More Hrs	EM5	2,953
Employed part-time (aged up to 20)	Employed 0-9 Hrs	EM1	245
	Employed 10-19 Hrs	EM2	559
Work-based training	Apprentice/Trainee	APP	23
	Cadetship	CDT	15
	Work-Based Training TEC	TWI	263
Tertiary study	Full-time Polytechnic	PFX	605
	University	UNX	101
Other training	Other Full-time Training	OFX	1,688
Training Opportunities	Training Opportunities	TTI	4,887
	Youth Training	TYO	9
Work and Income programme	Community Task Force	CTF	5
	Skill Enhancement	TEO	21
	Subsidised Employment	SBE	16
Unemployed/Out of labour force	Out of the Labour Force	OLF	1,138
	Unemployed	UNM	2,474
Unknown	Not Known	NOK	1,783
	Uncoded	(blank)	30
		Total	18,870

MSD and TEC outcomes at two months after course completion

	Year course ended	MSD status ^a						
TEC grouped outcomes	2008	Off benefit	Exit to work	Part-time work	Tertiary study	Subsidised work	Training Opportunities	MSD employment programmes (excl wage sub and TO)
Employed full-time (20+)	27%	69%	41%	6.9%	5.8%	7.3%	13%	15%
Employed part-time (1-19)	4.3%	25%	7.6%	29%	5.3%	1.1%	14%	20%
Work-based training	1.6%	31%	15%	7.6%	6.6%	9.3%	54%	7.3%
Tertiary study	3.7%	35%	2.5%	4.4%	32%	0.1%	12%	20%
Other training	8.9%	30%	3.0%	3.4%	21%	0.4%	17%	17%
Training Opportunities	26%	11%	2.6%	5.9%	5.3%	0.2%	48%	7.2%
Work and Income programme	0.2%	26%	9.5%	2.4%	4.8%	4.8%	21%	14%
Unemployed/Out of labour force	19%	29%	4.5%	2.7%	7.6%	0.3%	15%	18%
Unknown	9.6%	38%	9.0%	2.9%	9.5%	0.8%	13%	18%
	100%							
Total course end dates	18,870							

a: People can have more than one MSD outcome (eg off benefit and participating in an MSD employment programme) and for this reason the totals will not add to 100 percent.

Source: TEC and MSD, 2009, research results, not official TEC or MSD statistics.

MSD two-month outcomes

Two-month outcomes were calculated on the same day two months after course end date (placement_end_date).

BENEFIT STATUS

Benefit status was based on the MSD business rule, but included partners as well as primary and single clients. If a client's benefit status was current (srvst = 3) and on a main benefit (eg excluding supplementary benefits) they were defined as active on benefit. The business rule determines benefit status as it would have been on the system on that date. Any subsequent changes to the record (eg retrospective changes) are not accounted for.

If clients were not on-benefit, we identified their last benefit exit using the swfsumm.canceldg table to determine their exit reason, specifically exit to prison or had died.

PROGRAMME PARTICIPATION

Programme participation was based on the MSD research and evaluation dataset Participation_contract, which combines employment and training assistance spells across several MSD administrative systems. If a client was on one or more programmes two months after completing a Training Opportunities course they were categorised as participating in:

- a wage subsidy programme
- further Training Opportunities
- other Work and Income employment programme.

Clients could be participating in more than one employment programme over this period.

Because of the undercount in Training Opportunities participation spells, we replaced MSD Training Opportunities spells with TEC spells.

PART-TIME WORK ON BENEFIT

Part-time work was based on the MSD business rule for declared earnings restricted to earnings from work. The business rule does not take into account retrospective changes and for this reason underestimates part-time work outcomes. Further the business rule determines benefit status as it would have been on the system on that date. Any subsequent changes to the record (eg retrospective changes) are not accounted for. Such changes may be substantial where clients report income at a later date. Such delayed reporting of income would not be included in the current data extract.

STUDENT LOANS AND ALLOWANCES

A person was judged to be in tertiary study if they had an active (including provisional) student loan account or were eligible for allowances or bursary, and received a loan or allowance payment in the month. The measure may miss instances where an application had not been fully processed at two months after completing a Training Opportunities course.

RANKING MSD OUTCOMES

Because outcomes information comes from several sources and people can have several outcomes at one time (ie in part-time work and participating in a programme) we grouped outcomes together as shown in Table 11.

Ranked	Outcome	Observations
Off benefit work	Off Work	1,822
	Off Work Tertiary	90
	Off Work Tertiary WI prog	20
	Off Work WI prog	370
Off benefit tertiary study	Off Tertiary	557
	Off Tertiary WI prog	82
Off benefit subsidised work	Off Sub Work	46
	Off Sub Work Tertiary	Ę
	Off Work Sub Work	342
	Off Work Sub Work Tertiary	19
Off benefit Work and Income programme	Off WI prog	462
Off benefit unknown destination	Off	2,69
	Off Died Prison	64
Off honofit prices or diad	Off Died Prison Tertiary	8
Off benefit prison or died	Off Died Prison WI prog	1:
	Off Work Died Prison	
	On PT Work	61
	On PT Work Tertiary	3
	On PT Work Tertiary TOP prog	9
	On PT Work Tertiary WI prog	18
On benefit part-time work	On PT Work Tertiary WI prog TOP prog	:
	On PT Work TOP prog	21
	On PT Work WI prog	184
	On PT Work WI prog TOP prog	54
On benefit tertiary study	On Tertiary	41
	On Tertiary TOP prog	172
	On Tertiary WI prog	15
	On Tertiary WI prog TOP prog	3
On benefit Work and Income	On WI prog	1,52
programme	On WI prog TOP prog	47
On benefit Training Opportunities	On TOP prog	2,45
On benefit inactive	On	5,713
Unknown outcome	No swn Unknown	190
	Total	18,870

TABLE 11: GROUPING OF MSD OUTCOMES FOR COURSE COMPLETIONS IN

Off-benefit outcomes

The measure of off-benefit outcomes used the most current version of the SBEN table (Subsets) to identify spells on or off main benefits. The use of the current view of benefit spells means we miss short spells where benefits are suspended and re-activated (under eight weeks in duration). Benefit exits include all benefit cancellations where the exit reason is not coded as prison or death. Time spent off main benefit is calculated from benefit exit to the commencement of another main benefit. Receipt of supplementary assistance is excluded as is time spent receiving student loans and allowances.

Sustainable employment outcome measure

Sustainable employment is the official measure of employment outcomes used by MSD. Currently the sustainable employment outcomes are only reported for job seekers and not for other Work and Income client groups. The *Sustainable Employment Annual Report* analyses sustainable employment exits to begin to explore the employment outcomes of Carers and Health & Disability clients.

IDENTIFYING EXITS FROM BENEFIT

An exit is initially identified by a change in the client's benefit status in SWIFTT to either suspended or cancelled. The date a client suspends or cancels their benefit is defined as their exit to work date for reporting purposes. If there is any update to the client's record within 28 days of the initial status change, this is accounted for in the time people are defined as being in employment (see below). The 28-day window allows the majority of updates to be included for analysis, whilst allowing for timely reporting. Outside the 28-day window, any suspension or cancellation of benefit is treated as a separate employment exit.

Effect of updated records

Where an update occurs within the 28-day window, the effect of this is quantified as the number of days a client was paid after the effective date of the initial exit record. This will be used when calculating the client's time off benefit.

An update may occur to a suspended record or relate to a subsequent cancellation. Where a cancellation follows a suspension, the exit is counted only once, on the date of the suspension. If the cancellation occurs within the 28-day window, information from it, in particular the reason for and the effective date of the cancellation, may be used.

Changes to the reason associated with the exit, between the suspension and cancellation of a benefit (where the cancellation is within 28 days of the suspension), are reviewed, and an exit may be classified, or not, as a work exit based on this comparison. Changes to the reason or the effective date of the suspended record are treated in the same way, but should there be a cancellation this will be taken into account ahead of the revised suspension details.

Determining the effect of changes to the "reason for exit"

Work and Income has identified reason codes, which determine whether an updated reason will allow an exit to be considered work related or not. For example, where a client's benefit is originally suspended with the reason 'Address Unknown' but the subsequent cancellation reason (recorded within 28 days) is work-related, the exit is considered to be work-related. However, should the reason change from work-related to 'In Prison', the exit is not considered to be work-related. These are referred to as reasons that allow an exit to be re-couped or de-couped respectively.

Determining time in work

A client's time in work is calculated on the difference between the date they 'effectively' left the benefit and any subsequent return to benefit, or the date of a Student Allowance payment (if made) or the end of the period on which it is being reported. It is at this point that an adjustment may be made to the number of days the client has spent in employment. The net effect of the days the client was paid in relation to the original effective date of the suspension/cancellation, and any update to this, is determined, and the time in work may be adjusted.

For example, if a client is suspended on 1 October effective on 20 September, but subsequently receives a further week's benefit, this client would have seven days taken off the number of days they were counted as in employment. However, should a cancellation occur on 5 October with an effective date of 4 October, this later record would take into account the extra days for which the client was paid. Note the cancellation moves the effective date further than the days paid figure that was derived

earlier. Here the updated information is given priority, but had the effective date been earlier than the original effective date plus the number of days paid, the balance of days paid not taken into account would be taken off the time in work. (That is, had the cancellation effective date been 23 October, only three of the extra seven days the client was paid would have been taken into account. A further four days would have been deducted from the client's time in work for the reporting period.)



References

Ministry of Education (2009). *Training Opportunities: Statistical Profile 1999 to 2007*, Ministry of Education, Wellington.

Statistics New Zealand (2008). Linked Employer-Employee Data/Ministry of Social Development Feasibility Study: A report on the feasibility of integrating benefit data with Linked Employer-Employee Data, to produce official statistics, Statistics New Zealand, Wellington.