Evaluation In Action: assessing the literacy and numeracy training programme for job seekers

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Abstract

In 1998 the Commonwealth Government introduced the Literacy and Numeracy Training (LANT) programme to develop literacy and numeracy skills among the young unemployed to improve their labour market prospects. This paper focuses on the methodology of the evaluation of LANT including some of the problems that were encountered, and also discusses the main findings and recommendations.

The overall aim of the evaluation was to estimate the extent to which training affects clients' literacy and numeracy skills and participation in the labour market as compared to a suitable comparison group who did not participate in LANT. The evaluation was based primarily on quantitative analysis of administrative, Post Programme Monitoring and income support status data, as well as data from a telephone survey specially designed for the evaluation. Focus group sessions with programme clients were also conducted. A number of methodological problems were encountered, including identification of a suitable comparison group, data inconsistencies between the various data sources used in the evaluation, and estimating clients' duration in training and the overall attrition rate. The paper discusses how these and other problems were resolved and highlights the importance of continuing to monitor the impact of labour market programmes such as LANT.

Key words
Literacy, numeracy, labour market, unemployment, government programmes.

Overview
This paper discusses the methodology and findings of the evaluation of the Commonwealth Government's Literacy and Numeracy Training (LANT) programme. LANT was introduced in 1998 to improve job seekers' literacy and numeracy competencies, thereby increasing their chances of obtaining sustainable employment. The report on the evaluation of LANT was completed in March 2002.

Introduction
A significant body of research has shown a strong link between level of literacy skill and labour force experience. In the second report of the International Adult Literacy Survey (IALS) – a comparative study of literacy levels in twelve OECD countries – a direct association was found between literacy competency and employment, such that those with lower skills tended to receive lower wages and be unemployed for longer periods of time compared to those who had higher skills (IALS, 1997). In Australia, a survey by the Australian Bureau of Statistics found that approximately three times as many unemployed people (30%) were performing at

The views expressed in this paper are those of the authors and not necessarily of the Commonwealth Department of Education, Science and Training.

the lowest level of literacy skill compared to those who were employed (12%) (ABS, 1997[1]). In addition, the Longitudinal Surveys of Australian Youth (LSAY) have demonstrated a high correlation between low levels of literacy and numeracy achievement at school and subsequent experience of unemployment (e.g. see Lamb 1997 and 1998, Marks and Flemming 1998[1] and 1998[2]). As such, there is strong evidence to suggest that those with low literacy and numeracy competencies are more likely to experience longer and more frequent periods of unemployment and are less likely to obtain secure and stable employment.

To address the issue of developing literacy and numeracy skills among the young unemployed, the Commonwealth Government in August 1998 introduced the LANT programme, which was initially designed to alleviate youth unemployment by operating under the principles of Mutual Obligation. Under these principles, job seekers aged between 18 and 24 years who had been unemployed for six months or more were asked to supplement their job search activities with an additional activity designed to improve their skills and work readiness, in return for the continued receipt of their unemployment allowance (Ellison 1998). Participation in the LANT program was one of the options available to eligible young people in order to satisfy their mutual obligation requirements. After six months of unemployment, a young jobseeker was required to undertake an interview with Centrelink - the government agency that delivers a range of Commonwealth services including registration as a jobseeker and payment of income support. At this interview, the job seeker might identify himself or herself as having a literacy or numeracy need, or this might become apparent to the Centrelink officer during the interview. Those who were identified as having a literacy and numeracy need could subsequently undertake a pre-training assessment. If, after assessment, they were found to have literacy and numeracy skills below the National Reporting System[1] (NRS) Level three, they were then eligible to undertake training provided that there were no other substantial barriers that would inhibit their capacity to enhance their literacy and numeracy skills. Depending on clients' assessed NRS level, the duration of training was usually 300 to 400 hours over the period of 12 months. As such, training was undertaken on a part-time basis (6-15 hours per week) in order to allow clients to continue with their required job search activities.

Two significant changes were made to the LANT programme in 1999. The first change to the programme was to make participation mandatory for those mutual obligation clients who were assessed as in need of improving their literacy and numeracy skills (i.e., those who were assessed as below NRS level three). The second change made LANT available to job seekers outside the Mutual Obligation group who met the eligibility criteria. For these job seekers, participation in LANT was voluntary. In addition, the age group required to participate in a Mutual Obligation activity was extended to those aged 25 to 34. As such, these changes meant that the potential target group for LANT was substantially widened.

Evaluation of LANT
The aim of the evaluation (Rahmani, Crosier and Pollack, 2002) was to examine the outcomes of the programme and to estimate the extent to which training affects clients' literacy and numeracy skills and participation in the labour market. According to the LANT Programme Guide (DETYA[2], 1999:10), a client can achieve a successful outcome in one of two ways:
- the client makes a minimum improvement in literacy and numeracy skills in three particular National Reporting System (NRS) macro skills – Reading, Writing and Numeracy; or
- the client gets a job involving at least 20 hours a week and remains in that job for at least 6 weeks.

The extent to which clients achieved these two outcomes was the major focus of the evaluation. However, issues relating to the participation and completion rate of clients, as well as their subsequent participation in education/training courses were also examined. As such, the evaluation examined the programme in terms of:
- the extent of participation and completion;
- improvement in literacy and numeracy competencies;
- employment outcomes;
- income support status; and
- subsequent education/training participation.

Methodology
The evaluation sought to compare the outcomes of the programme for LANT clients against the outcomes of a suitable comparison group. However, a number of methodological problems were encountered which needed to be addressed in order to provide an accurate assessment of the impact of LANT. These included:

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[1] The NRS is the framework developed for reporting the outcomes of English language, literacy and numeracy provision. Details can be obtained by accessing the NRS web site at www.nrs.dest.gov.au
[2] The Department of Education, Training and Youth Affairs is now known as the Department of Education, Science and Training.

- identification of an appropriate comparison group;
- data inconsistencies between the various data sources used in the evaluation; and
- estimating clients' duration in training and the overall attrition rate.

Identification of an appropriate comparison group

In terms of assessing the net impact of the programme, a matched comparison group approach was not feasible because there was no available indicator of literacy and numeracy skill on which to identify a group that was like LANT participants in all respects other than their participation in LANT. Instead, a quasi-experimental design was utilized which compared the outcomes of those who participated in LANT (referred to as starters) to the outcomes of jobseekers that were eligible for LANT (i.e., who were identified as experiencing literacy and numeracy difficulties) but who did not participate in the training for various reasons (referred to as non-starters). However, due to the fact that the two groups were not randomly assigned, differences between the characteristics of the two groups could potentially bias the results.

The background characteristics of starters and non-starters were examined using chi-square analysis and are presented in Appendix 1. It was found that a slightly greater proportion of those who started training were female, aged less than 18 and older than 44 years, and residing in the state of Queensland. However, these differences were small and were not of sufficient magnitude to affect the findings from the analyses.

In order to control for background characteristics, multiple regression was used to examine the outcomes of the starter and non-starter groups. Although the observable background characteristics of starters and non-starters were similar overall, it was necessary to provide a more comprehensive test of selection bias and, in particular, how this might affect the outcomes of starters and non-starters. Selection bias occurs when certain characteristics or factors (such as age, gender, education) cause differential selection into different groups – in this case the starter and non-starter groups. This is problematic when using regression procedures, as these factors may also be causes of the outcome (dependent) variable, causing correlation of error between the group membership and outcome variable and thereby violating regression assumptions about correlated error. As a result, two stage regression techniques were used in the final analyses as this procedure provides a test for selection bias as long as all important factors accounting for selection are included in the set of measured independent variables.

The strategy of using two stage regression procedures to test for selection bias is to predict participation/non-participation in the training group in the first stage, based on the characteristics or factors thought to be relevant to the selection. This results in an estimated probability of selection which is subsequently used in the second stage regression as an independent or explanatory variable of the outcome being examined. If the regression coefficient of this variable is not statistically significant, it is concluded that selection bias is not a problem.

Overall, the analyses found no evidence of selection bias, indicating that any effect of selection bias does not substantially influence the findings for the outcomes. However, starters and non-starters may have differed on other characteristics that were not measured, such as motivation, self-confidence and attitudes to work. Consequently, unmeasured differences between the groups could potentially bias the results. Nevertheless, given the constraints of the evaluation design, those who were referred to LANT but did not participate (i.e., non-starters) represented the most appropriate comparison group.

Data inconsistencies between the various data sources

A major component of the evaluation was quantitative analysis of administrative data held by the Department of Education, Science and Training (DEST) and the Department of Employment and Workplace Relations (DEWR); Post Programme Monitoring (PPM) and income support status data from DEWR; and data from a telephone survey specially designed for the evaluation.

The administrative and PPM data from DEST and DEWR contained demographic and programme outcome information on 6,248 job seekers who either started or had been referred to but did not start LANT, between August 1998 and October 1999. The telephone survey was conducted using a Computer Assisted Telephone Interview (CATI) method by an external consultant on a sample of these job seekers in April 2001. Survey respondents were asked questions regarding their experiences of the LANT programme, their reasons for starting the training, their satisfaction with the services that were provided, their employment, earnings and subsequent education/training participation, and their self-perceived improvements in their literacy and numeracy skills. A total of 2,203 useable responses were obtained and included in the evaluation.

Unfortunately, analysis of the data was not straightforward. A number of problems were identified with the DEST and DEWR administrative data, which affected the reliability of the results. Some of the major problems were:

- *Client records* - there were considerable differences in the number of client records between the DEWR and DEST data sources[3]. For example, DEST data on commencements had a number of extra records for the period August 1998 to October 1999. DEWR had no programme commencement information for these participants as their placements were not confirmed. These data are likely to have been manual records that were initiated to allow a provider to provide services to a client, and be paid for those services, when Centrelink had not input referral details into the DEWR IES after a reasonable period of time. DEWR was requested to provide additional information for these clients. These clients were then included in the data set.

- *Training cessation dates* – a number of clients from the DEST data had training cessation dates that differed by between one and twelve months from those recorded in the DEWR system. The different cessation dates made attrition estimates and the total training duration calculations complicated since it was difficult to assess which was the most accurate date.

- *Incomplete and inconsistent data* – it was found that many records were incomplete with regard to provider payments, as well as clients' total number of training hours completed, cessation date, and actual outcomes. The data recorded by DEST and DEWR were also inconsistent in many instances.

The survey provided a somewhat more coherent record of clients' experiences in training and their post programme outcomes. However, a number of problems were also encountered with this data. In some cases, the length of time between clients' completion or withdrawal from training and their participation in the survey was considerable – up to one-and-a-half years. This affected the reliability of clients' recall of their training experiences and also contributed to the high proportion of clients who were unable to be contacted because they had changed address (31% of a total of 5,382 clients included in the survey sample). In addition, there were a significant number of clients from non-English speaking backgrounds (9%) who did not have sufficient English speaking and comprehension skills to enable them to participate in the survey. Although six attempts were made to contact each individual client, these factors contributed to a lower survey response rate than anticipated – 42 per cent overall.

The telephone numbers of all clients included in the survey sample were recorded in the DEST and DEWR administrative records. Approximately 10 per cent of these clients had silent phone numbers. In order to obtain the most representative sample possible, it was determined that these clients be retained in the sample, however, this presented an issue with regards to maintaining client privacy. To resolve this, all clients were contacted by mail to inform them of the commencement of the telephone survey and to provide them with the opportunity to withdraw from the sample. Overall, only a handful of clients chose to withdraw.

DEST has now developed a centralised, Internet database system known as LNP IS (Literacy and Numeracy Programme Internet System, to be known as LLNP IS – Language, Literacy and Numeracy Programme Internet System after commencement of LLNP in 2002) that has been in use since July 2000. This system will record all data into a single database and will hopefully overcome some of the problems relating to the timely and accurate collection of client information that has been revealed in the present evaluation.

Estimating clients' duration in training and the overall attrition rate
In order to examine the impact and effectiveness of the LANT programme, it was important to accurately estimate the duration of time clients had spent in training, as well as the overall attrition rate. However, due to the flexible nature of attendance within the LANT programme (clients could attend between six and 15 hours per week), an accurate estimate of duration of training for those clients who had withdrawn before completion was difficult to ascertain. For example, a client undertaking the programme on a higher intensity could complete the training within six months, whereas a client undertaking the programme on a lower intensity could take anywhere between nine and twelve months to complete. Furthermore, information on training intensity was not collected as part of the administration of the programme and although some inferences could be made on the basis of other data, such as duration of training and number of completed hours, these were found to be unreliable. Due to the fact that course length and training intensity were different for each client, it was decided that a measure of duration of training for those clients who had withdrawn would be based on whether or not they had reached the mid-point of their training.

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[3] According to program administrators, a significant factor contributing to the discrepancies between the data sets was a need in the early stages of LANT to depart from the planned use of PASS to record client details, to a less resource intensive arrangement because of lower than anticipated resources in State offices.

Estimates of whether a client had reached the mid-point of training were based on a number of different data sources. For example, whether or not a mid-point payment was made to service providers by DEST was used as one source for estimation, as providers were paid in three instalments – when a client first entered training, at the mid-point of training, and if a successful employment or NRS outcome was achieved. Although the mid-point payment provided an ostensibly accurate estimate, it was found that in some cases the payment records underestimated the number of clients who actually reached the mid-point of training. This was due to some providers, particularly in the early stages of the programme, not claiming all of the payments that they were entitled to. In other cases, the payment data was found to overestimate the number of clients who reached the mid-point of training. This occurred when a client withdrew from training because they had achieved a successful employment outcome, which would trigger a full payment in some cases. Bulk payments to providers early in the programme further complicated the data. Finally, inconsistencies between the administrative data recorded by DEST and DEWR were also found.

A second source of data that provided a possible estimate for the mid-point of training was the DEST data records relating to a client's completed number of hours of training and their training mid-point date. However, in a large number of cases this data was missing. Furthermore, attempts to calculate the mid-point of training directly from clients recorded commencement and expected training cessation dates were complicated by the fact that the DEST and DEWR data records were inconsistent for a significant number of clients. To overcome the limitations of the data, a three-step approach was used to estimate whether clients had reached the mid-point of their training:

- where a second payment was recorded and the training duration was longer than half of the expected duration; or
- the second payment was not recorded in the DEST data but the date of the mid-point payment was recorded and this was before the cessation date; or
- in cases where there was no second payment amount or mid-point date recorded, but the total training duration was longer than half of the expected duration.

Based on this approach, an estimate of clients' duration in training, as well as the proportion of clients who withdrew before and after reaching the mid-point of training, could be made. Those commencing clients who were estimated as having withdrawn before reaching the mid-point were referred to as 'early-leavers', whereas others were referred to as 'late-leavers'.

Participation and completion
The vast majority (84%) of the clients who were referred to LANT participated in the programme with the rest (16%) not starting. Overall, the differences between starters and non-starters were small and the major points relating to the background characteristics of the starter group are presented in detail in Appendix 1.

The reasons why eligible clients participated or did not participate in the LANT programme were examined in the survey. The main reasons given by respondents for participating in LANT were to improve their reading, writing and maths skills (54%), because Centrelink had told them to do it (21%), to improve their English language skills (18%), and to help them to get a job (16%).

The major reason given by those respondents who did not participate was that they found employment (30%). Other reasons were that they did not see the training as worthwhile (12%), they had a health problem or some disability (10%), or they had problems with childcare/family commitments (9%).

As explained above, an accurate estimate of the number of clients who completed LANT in full and their duration in training was difficult to ascertain due to the nature of the programme and the inconsistencies in clients' records. As such, a range of estimates based on the different data sources was made. Overall, it was estimated that between 24 and 47 per cent of commencing clients completed LANT in full, and between 40 and 60 per cent withdrew before reaching the mid-point of their training. Importantly, the main reason cited by survey respondents (42%) for withdrawing from LANT early was that they found employment.

Finally, a number of differences were found between clients who started training and left early (i.e., before reaching the mid-point), and those who left late (i.e., after the mid-point or those completed their training in full). Specifically, those who left late were older, more educated, and had longer prior unemployment durations. On the other hand, those who left early were younger and less educated, and had shorter prior unemployment durations.

Literacy and numeracy outcomes

The evaluation examined the extent to which clients achieved an NRS outcome based on the administrative data, as well as their self-perceived improvements in literacy and numeracy which were collected in the survey. According to the DEST administrative data, 17 per cent of clients who started LANT achieved a successful NRS outcome. This relatively small proportion appears to reflect a number of factors. The NRS assessment of clients' skills was undertaken in the final stages of training, however, the fact that a substantial proportion (over 60%) had withdrawn before completing their training meant that only a small proportion actually had their skills assessed. In addition, information gathered in the earlier PIR indicated that some clients were anxious or nervous about having their skill level assessed and withdrew from LANT immediately before their scheduled assessment date. However, there was evidence from the survey that clients themselves perceived an improvement in their skills. Of the clients who started LANT and responded to the survey, approximately 80 per cent indicated that the training was helpful with regard to improving their reading, writing, maths and English speaking skills.

Multivariate analyses of the administrative data revealed that those who were more likely to achieve a successful NRS outcome were females, older clients, those with longer prior unemployment durations and those from NSW (and the ACT). Analyses of clients' self-perceived improvements in literacy and numeracy skills (as obtained from the survey) also revealed that those who remained in training longer, and those who were more satisfied with the LANT programme, were more likely to perceive an improvement in their skills. However, these findings should be interpreted with caution as research in this area indicates that self-perceived competency in literacy and numeracy is often over-estimated (ABS, 1997[2]). Moreover, this might be particularly so for those who invested more time into their training and those who were more satisfied with the LANT programme.

Employment outcomes

The major objective of the LANT programme is to improve the literacy and numeracy skills of unemployed jobseekers in order to increase their chances of acquiring sustainable employment. As such, the evaluation sought to examine the extent to which the labour market outcomes of individuals who participated in LANT had changed in relation to what would have occurred in the absence of training. This was done by comparing the employment outcomes of individuals who participated in LANT with those of non-starters.

Due to discrepancies in the administrative data, the survey data appeared to provide the most accurate estimate of eligible clients' employment outcomes. The employment outcomes of survey respondents are presented in Table 1.

Table 1: Job outcomes of survey respondents

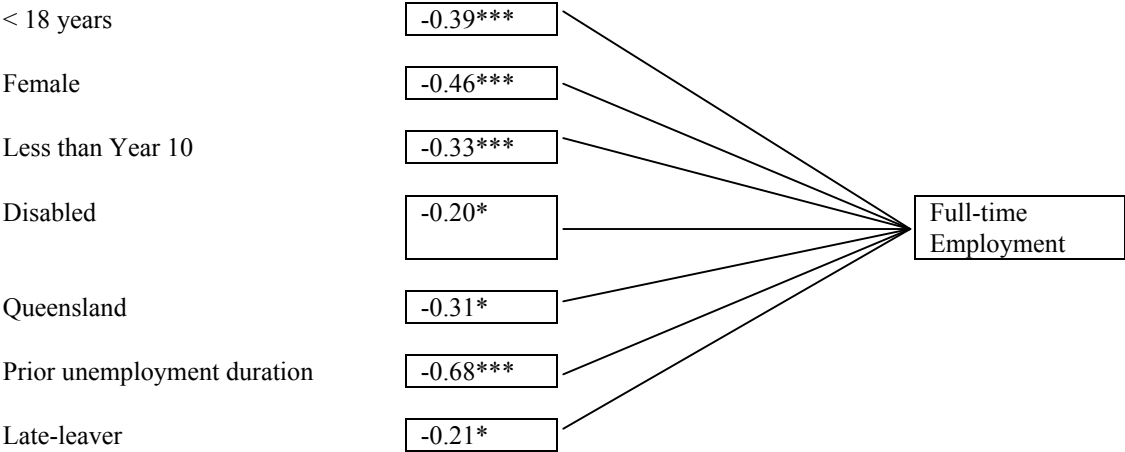| Outcomes	Non-starter		Starter		Early-leavers		Late-leavers	
Working in a paid job								
No	146	(66)	1303	(66)	627	(61)	644	(71)
Yes	75	(34)	679	(34)	409	(40)	260	(29)
Total	221		1982		1036		904	
Employment status								
Full-time	29	(39)	242	(36)	158	(39)	82	(32)
Part-time	13	(17)	98	(14)	50	(12)	46	(18)
Casual,seasonal, temp.	25	(33)	293	(43)	169	(41)	118	(45)
Contract	3	(4)	23	(3)	17	(4)	6	(2)
Self-employed	5	(7)	23	(3)	15	(4)	8	(3)
Total	75		679		409		260	

Percentages are in parentheses.
Source: Survey

As it can be seen, the same proportion of starters and non-starters were employed at the time the survey was conducted (34%). However, care should be taken in making comparisons between these groups, as approximately 30 per cent of non-starters did not participate in training because they had found a job. On the other hand, those who started training had less time to look for work as they were occupied with training. Descriptive analyses also indicated that a significantly greater proportion of those who started LANT but withdrew early (early-leavers) were working in a paid job compared to non-starters and late-leavers (40% versus 34% and 29% respectively). Furthermore, the majority of both starters and non-starters were working in low-skilled jobs, primarily labouring or related work.

Figure 1 presents the results of a logistic regression analysis examining the demographic and training participation variables influencing LANT clients' full-time employment outcomes. All significant variables were negatively related to full-time employment outcome indicating the extent to which a successful employment outcome was less likely. In particular, younger clients, females, those with lower levels of education and those who had longer unemployment durations prior to LANT were less likely to obtain full-time employment. Disabled clients and those residing in Queensland (as compared to NSW and (the ACT)) were also less likely to obtain full-time employment.

Figure 1: Variables predicting full-time employment outcome (based on survey data)

< 18 years	-0.39***	
Female	-0.46***	
Less than Year 10	-0.33***	
Disabled	-0.20*	Full-time Employment
Queensland	-0.31*	
Prior unemployment duration	-0.68***	
Late-leaver	-0.21*	

Standardized regression weights in boxes.   *** p < .001, ** p < .01, * p < .05,
Reference category - aged 25-34; male; completed Year 10; NSW; early-leaver.

While there was little difference in the employment outcomes of clients who did not start training and those who started but withdrew early (early-leavers), by comparison, those who remained in training longer, or completed their training in full (late-leavers), were less likely to find full-time employment. It could be that late-leavers, who were more educated and mature (older) than early-leavers, were more committed to improving their basic skills and less focused on finding employment, particularly during the course of their training. Late-leavers had also spent less time participating in the labour market post LANT, compared to early-leavers.

Finally, there was some evidence from the survey that clients who perceived an improvement in their literacy and numeracy skills were more likely to gain employment. However, as mentioned above, this result should be interpreted with caution due to the tendency for people to over-estimate their literacy and numeracy skills.

Income support status
Eligible clients' income support status provides another indication of outcomes, as the majority of clients who exit income support do so as a result of finding a job. Data on eligible clients' income support status was obtained at three, six and nine month intervals after cessation of LANT. While space limitations prevent a detailed discussion of the analysis of income support status, the findings were broadly consistent with those for employment outcomes. Indeed, it was found that at three months post LANT, 30 per cent of starters and 28 per cent of non-starters had exited income support. The proportion of eligible clients who had exited support increased over time, with similar proportions of starters and non-starters exiting at six (35% and 36% per cent respectively) and nine months (41% and 39% respectively) post-LANT.

There was also some evidence that a proportion of clients who exited income support subsequently returned at a later date. Although this proportion could not be accurately estimated from the available data, the evidence of churning is consistent with evaluative studies that have investigated the outcomes of similarly disadvantaged jobseekers (e.g., Friedlander and Burtless, 1995).

Subsequent education/training participation
Overall, approximately 25-30 per cent of eligible LANT clients had participated in other education/training courses after leaving or being referred to LANT. The survey data revealed that similar proportions of starters (29%) and non-starters (24%) had participated in another education/training course after leaving or being referred to LANT. Furthermore, the type of education/training course that the majority of eligible clients were participating in at the time of the survey was a literacy and numeracy course (20%), a general English course

(16%), or a computer course (9%). However, of those who started LANT, those who remained in training longer, or who completed their training in full (i.e., late-leavers), were more likely to participate in another education/training course post LANT. This supports the notion that some clients use LANT as a bridging course to further training and skill development, thereby potentially enhancing their future employment prospects. Indeed, the vast majority (72%) of those who had participated in another education/training course indicated that taking part in LANT had helped them a little or a lot to gain entry to their course.

Conclusions

Overall, the findings indicate the need for making a cautious assessment of LANT's effectiveness in building literacy and numeracy skills.   There was some evidence from the survey data that LANT had made improvements to the lives of participants. For example, the majority of survey respondents who participated in LANT perceived that the training had helped them to improve their reading, writing and maths skills. There was also evidence from the survey that clients who perceived an improvement in their literacy and numeracy skills were more likely to gain employment. However, the extent to which clients' actual skill improvement was related to their employment outcomes could not be ascertained as only a small proportion of clients underwent final skill assessment.

The finding that employment outcomes were lower for those who completed LANT than for those who did not start o`r who left early needs to be interpreted carefully. This result could reflect a number of factors at work including:

- the shorter time period for completers to find work between finishing their course and the survey period than non-completers (due to problems with the quality of the data on cessation dates it was not possible to control for this factor in the analysis);
- unobservable factors such as motivation to acquire skills through completing the course; and
- self-selection throughout the duration of the course whereby those who are most job-ready[4] and least motivated to complete would leave to take work.

Importantly, the majority of clients who withdrew from the LANT programme did so because they had found paid work. Indeed, the background characteristics of these clients suggest that they were more job ready. However, as clients were required to look for work whilst participating in LANT, it is difficult to ascertain whether it was clients' job searching activity, their relatively more favourable background characteristics, or improvements in their literacy and numeracy which had the greatest impact on employment. Most likely, it was a combination of these factors, with clients who were more job ready feeling more confident about attending job interviews and searching for work to the extent that they perceived improvements in their skills.

The strong link between education and employment indicates that unemployed jobseekers with low levels of literacy and numeracy are substantially disadvantaged in their search for work. While the LANT programme was designed to assist such jobseekers by improving their basic skills, requiring LANT clients to actively search for work and leave training as soon as they secured a job appeared at odds with the programme's focus on skill improvement. Consequently, it was suggested that clients might benefit more from training by placing a greater emphasis on literacy and numeracy outcomes and by adopting a more flexible approach to programme delivery in order to approximate clients' needs more closely. It was also suggested that the length of training – up to 12 months – and the lack of certainty that training would lead to a job might be a deterrent to some clients, or might affect clients' motivation or commitment to completing the course. As such, it was recommended that the training programme could be structured to cater for clients who wished to undertake courses that were shorter in duration but of greater intensity (e.g., 20 hours per week or more), as well as those who wished to undertake longer courses that were less intensive. This included making clients' requirements for job search activity dependent on the intensity of the course that they were undertaking.

Finally, the evaluation revealed considerable inconsistencies in the different datasets that were used to record client information and highlights the need for high quality data as the basis for evaluations.   These inconsistencies constrained the evaluation's capacity to assess programme effectiveness and prevented accurate estimates of the proportion of clients who completed LANT in full and those who withdrew early.   The reliability of clients' recorded outcomes in the DEST and DEWR datasets was also questionable.   The new

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[4] In an earlier evaluation of LANT (Rahmani, Pollack, and Wade, 2000: 22-23), it was found that in the initial implementation of the programme, auto referral to Intensive Assistance (IA) had a big impact on referral numbers for LANT. To address the problem of low referrals, changes to Centrelink referral priorities in early 1999 meant that if literacy and numeracy problems among other barriers preventing them from finding work were identified through the Job Seekers Classification Index (JSCI) or through interviews, referral to assessment for LANT was given priority over referral to IA.

centralised, Internet database system LLNP IS (Language, Literacy and Numeracy Programme Internet System) should overcome some of these data problems so that more accurate information relating to the effectiveness of LANT or similar programmes can be obtained in any future evaluation.

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Appendix 1

LANT at a glance (August 1998 – October 1999)
(Total number of clients = 6248)

Characteristics	Non-starter n = 1026		Starter n = 5222	
Type of Commitment				
MO	95	(9)	494	(10)
NON-MO	931	(91)	4728	(90)
NRS Level				
NRS 1	86	(64)	2917	(58)
NRS 2	49	(36)	2080	(42)
Missing	891		225	
Gender				
Male	754	(73)	3482	(67)
Female	272	(27)	1740	(33)
Age (Year)				
<18	157	(15)	983	(19)
18-24	360	(35)	1544	(30)
25-34	243	(24)	1048	(20)
35-44	174	(17)	986	(19)
>44	92	(9)	661	(13)
Unemployment Duration (months)				
≤6	463	(45)	2739	(52)
7-12	143	(14)	728	(14)
13-18	101	(10)	413	(8)
19-24	52	(5)	286	(6)
>24	267	(26)	1056	(20)
Education Completed				
Primary	84	(8)	485	(9)
Less than Y 10	464	(45)	2171	(42)
Y 10	252	(25)	1275	(24)
Y11	58	(6)	271	(5)
Secondary	100	(10)	547	(11)
TAFE, Trade, Dip	45	(4)	312	(6)
Tertiary	17	(2)	122	(2)
Other/missing	6		39	
Other included above				
Total Indigenous	59	(6)	277	(5)
Total LBOTE	315	(31)	1690	(32)
Total Disability	252	(25)	1170	(22)
Total Sole Parents	11	(1)	128	(3)
State				
NSW	291	(28)	1274	(24)
QLD	153	(15)	1195	(23)
VIC	408	(40)	1723	(33)
SA	49	(5)	243	(5)
TAS	21	(2)	178	(3)
WA	86	(8)	492	(9)
ACT	5	(1)	41	(1)
NT	13	(1)	76	(2)

Note: Valid percentages (excluding missing values) are shown in parentheses. Sum may not equal one hundred due to rounding error.

Source: DEWR/DEST