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Pedagogy in practice: an observational study of literacy, numeracy and language teachers

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Executive summary

The aim of this study was to gain an overview of how teachers teach literacy, numeracy and language (LNL) in New Zealand, by observing 15 literacy, language and numeracy teachers from tertiary institutions, community organisations, workplaces and private training establishments.

The teachers were observed for an average of 167 minutes over two sessions; they were also interviewed after the first observation session. The sample included 1:1 teachers, as well as those who teach in small groups and classes. Data from the observations was recorded on specially designed data sheets; notes were taken by the observers and both the sessions and interviews were recorded wherever possible.

Main findings (these are discussed in fuller detail in Sections 5 and 6 of the report)

Teacher status and background

- teachers were predominantly female, aged 40+ years and Pakeha
- they held a wide range of qualifications, including school teaching qualifications, but only a small number held LNL-specific or adult education qualifications
- there were wide variations in the amount of teaching they did per week and the time they spent on preparation
- they had been able to attend variable amounts of professional development over the previous year
- some of their teaching positions had less than ideal conditions.

Physical environment and teaching resources

- there were wide variation in the physical environment and teacher resources available, from good to much less than ideal
- computers were widely available, but were mainly used for word-processing rather than computer-aided teaching

Generic teaching

- all teachers had created positive, supportive learning environment and they had a high level of commitment to the welfare of their learners
- teachers talked much more than learners(up to 60% of the time), even in classes
- questioning plays a very prominent role in the teaching process; however, teachers mostly asked 'closed' questions and did not use questions as scaffolds for further teaching
- there was some evidence of teaching meta-cognitive skills and limited amounts of sustained discussion or debate

Forms of provision

- considerable variations were observed in the length of programmes, the amount of teaching per week and the actual amount of literacy teaching that took place within programmes

- teachers used 'authentic' curricula, largely in terms of them choosing content that was adult-appropriate and topical; there was little evidence of learner-directed content
- there were wide variations in the amount of LNL teaching that observed in integrated programmes
- 1:1 and group teaching both have distinctive, positive features

Teaching of LNL skills

- only a limited number of deliberate acts of reading teaching were observed by researchers
- most teachers used a relatively small range of teaching methods
- most spelling was taught incidentally and was closely linked to teaching of reading
- miscues were rarely used as teaching opportunities when learners were reading
- numeracy teaching was clearly linked to diagnosed learning needs and numeracy tasks were graded to match learners' skills
- researchers observed only a few sessions where writing was taught; teachers said they found the teaching of writing difficult and that writing was often left out of teaching sessions to make room for other activities
- teachers appeared to use the same teaching strategies for ESOL as for others for whom English was a first language
- speaking and listening skills were seen as important means of building social and personal skills and were interspersed with the teaching of other skills.

Recommendations

The study recommended a number of research projects to follow on from this, including:

- a large scale survey of tutors
- an investigation of how LNL teaching takes place in integrated programmes
- an action research project that investigates effective ways to challenge and change tutors' behaviours, as part of on-going professional development
- dissemination of these research findings to tutors in the field.

1. Introduction

This research study of how literacy, numeracy and language (LNL)[1] teachers actually teach is the first of its kind in New Zealand, and one of a small number internationally. It is part of a growing body of research in this area (Benseman, 2003).

The purpose of this study was to start the process of exploring literacy, numeracy and language teaching by observing how 15 tutors in a cross-section of LNL contexts actually teach their students these skills. The results of this study should not be taken as a definitive study where the results can be generalised to all literacy, numeracy and language teachers in New Zealand. Rather, as an exploratory study involving only a small number of teachers and limited observation durations, it is intended to give a glimpse into what probably goes on in a reasonable number of these classrooms. As such, we hope that the findings will provoke debate not only about whether or not our findings are truly indicative of literacy, numeracy and language provision, but more importantly, what literacy, numeracy and language teachers *should* be doing as teachers. In relation to this latter point, readers are directed to the literature review (Benseman, Sutton, & Lander, 2005) on effective literacy, numeracy and language teaching completed in conjunction with this study. Where appropriate, results from this literature review have been included in the discussion of the findings from our study.

We would like to sincerely thank the literacy, numeracy and language teachers, managers and learners who courageously volunteered to participate in this study. All of them gave graciously and generously of their time, both in letting us observe their teaching and also in follow-up interviews. We trust that we have done them justice in how we have reported their work as teachers in what is undoubtedly a demanding, but satisfying, sector. In particular, we would like to acknowledge the teachers' commitment and concern for the best interests of their learners.

[1] For a more detailed discussion about the dimensions of literacy, numeracy and language in New Zealand see Benseman, Sutton & Lander (2005). While we have generally tried to avoid acronyms in our writing, LNL is used as a shorter alternative to 'literacy, numeracy and language'.

1 Literature review

Despite its centrality to literacy, numeracy and language programmes, there are only a few observational studies of teachers in the process of teaching. There is a large literature of opinion pieces about pedagogical practice (actual and ideal - see for example, Imel, 1998), but very few empirical studies of actual practice. The following section reviews the most pertinent studies, as well as other research on issues arising out of the study.

1.1 Observational studies of LNL teaching

We have located only three studies of literacy, numeracy and language practice worthy of note (Beder & Medina, 2001; Besser et al., 2004; Scogins & Knell, 2001) that provide detailed information and insight into how LNL teachers teach. Details of their research methodologies are included in addition to their findings, to provide points of comparison to this study's methodology.

Beder & Medina (2001)

Beder and Medina's study[2] involved observation of 20 adult literacy classes in eight US states and interviews with the teachers of each of these classes. The research sites were chosen to maximise programme and learner diversity across 18 variables that previous research had shown to be 'shaping variables'. Observation data was collected for each classroom on four occasions. The teacher interviews were held after the first observation to provide a focus for the open-ended questions and all the interviews were recorded and transcribed. Where possible, learners were also interviewed.

Although the authors caution about results being generalised because of the sample size and the fact that they were not randomly selected, the study is particularly valuable because it studied teachers' actual behaviour in classrooms, rather than self-report.

Teaching content and methods

The authors reported that the dominant content and structure of instruction was 'discrete skills instruction' (in 16 of the 20 classrooms) characterised by teacher-prepared and teacher-delivered lessons. The other category was 'making meaning' involving a broader interpretation of literacy, including critical literacy elements (four classrooms). They found little evidence of critical thinking, problem-solving, oral skills, writing, creativity or teaching about social issues. The authors remain neutral about the desirability of such practices, but do pose the question: If the essence of becoming literate is the acquisition of concrete skills and factual knowledge, then the norm has merit. "Yet, is literacy something more?" (Beder & Medina, 2001, p. 2)

The authors also point to a contradiction between the teachers' 'progressive-humanist' values and their actual teaching practices.

> In contrast, the data from our 40 observations portrayed a type of instruction that was the near antithesis of learner-centred instruction. In each and every case, the organising unit of instruction was a teacher-

[2] Carried out as part of the National Center for the Study of Learning and Literacy (NCSALL) research programme.

> prepared and teacher-delivered lesson. There was virtually no evidence of substantive learner input into decisions about instruction. Communication was overwhelmingly teacher-to-learner, learner-to-teacher. Learner-to-learner communication rarely occurred unless the teacher tried to direct it to occur through such things as peer coaching exercises (ibid.).

They attributed the discrepancy between espoused and actual practices to the fact that the majority of the teachers had been trained as school teachers and found it difficult to break from these models of teaching. Furthermore, the students themselves expected and reinforced this model of teaching and the time pressures associated with achieving a GED qualification[3] meant that teachers 'maximised' their teaching time by relying predominantly on teacher-led instruction. However the teachers were much more learner-centred in their personal relationships with the learners. So while their instruction is teacher-centred, "their learner-centred values and beliefs are manifest in their affective relations with learners" (op. cit., 5).

It is interesting to speculate as to the comparability of the GED to the New Zealand context. While many literacy, numeracy and language programmes in New Zealand are now influenced by the curriculum demands in unit standards requirements, there appears to be more flexibility than is apparent in GED programmes. Certainly, many LNL contexts such as community-based provision, are still relatively unfettered by outside constraints and are free to base their content and teaching on learners' choice (largely confirmed in the present study).

Classroom processes

The authors identified seven processes they thought important in understanding how classrooms functioned:

- sanctioning to reward and punish behaviour
- engagement of learners in the lesson
- directing instructional activities
- correcting learner errors
- helping students with problems
- expressing values and opinions and exploring ideas
- functioning as a community.

The report gives examples of each of these processes, but is largely descriptive in nature, rather than evaluative of their importance. They reported that only about a quarter of the classes promoted feelings of community (which appeared to be more common among homogeneous groups of learners) and learners were rarely asked about their feelings, opinions or beliefs.

> In more than three-quarters of the classes we observed, teachers rarely solicited learners' values, attitudes or opinions and learners rarely volunteered them. If such expression did occur, it was typically episodic and functioned as a brief aside rather than being integrated into the lesson or becoming a segue to further discussion. As a result, free-flowing discussions in which learners interacted with other learners were rare (op. cit., 102).

[3] The General Education Development certificate (GED) is a test in maths, English, social studies, taken as a post-school alternative to a high school diploma. In the US, the large number of adult education/adult literacy students studying to attain a GED (with pre-determined curricula) is very influential on programmes.

'Shaping factors' and issues

The researchers observed considerable lateness and 'tuning out' among the students, which was largely tolerated or ignored by the teachers (thought to reflect an attitude towards them as adults). They point out that these behaviours are probably indicators of withdrawing from the programmes and warrant further exploration by researchers. The biggest issues affecting classroom dynamics they observed were the process of continuous enrolment (with constantly changing numbers of learners[4]) and the mixed skill levels of learners. They also identified the characteristics of the learners and funding pressures, which affects not only the eligibility of students, but also the curricula taught.

In their conclusion, the authors stressed the importance of professional development to extend teachers' instructional repertoires and the need to review funding requirements to better match areas of learner need and the length of instruction required for learners.

Scogins & Knell (2001)

This second study[5] used a sample of nine adult education classes across Illinois. The researchers used the same observation and interview protocol as the one reviewed above. Each class was observed for 90 minutes twice over a two-month period. As with the previous study, the researchers were careful to stress that their findings could not be generalised because of the nature and extent of the sample.

The sample

Class sizes varied from six to 26 and were evenly split between daytime and night-time classes. Availability of resources and physical environments varied considerably, although most used a rectangular or circular arrangement of tables for the learners. Attendance was much higher (85%) in the English for Speakers of Other Languages (ESOL) classes, whereas attendance in the non-ESOL classes was only 43%.

Most of the learners were in GED classes and predominantly 17-20 years old (with even numbers of men and women, African Americans and Caucasians). Adult Basic Education (ABE) learners tended to be a little older. The learners reported satisfaction with their classes (complaints were mainly about the physical environment); the most important factor in class satisfaction reported by learners was being respected and treated like an adult by the teacher.

Teaching content and methods

The dominance of GED preparation is also seen in this study by the fact that 42% of these classes were focused on 'learning to write the GED essay' and more time was spent on test-taking strategies (22%) than either the teaching of reading (20%) or maths (13%). Even the ABE classes were dominated by maths and writing (34% each) and only 17% on reading. In contrast, ESL classes were dominated (60%) by conversation, speaking and listening skills.

[4] Referred to as *churn* in New Zealand.

[5] This group of researchers were advised by Hal Beder and Patsy Medina from the previous study.

There was considerable variation in the time spent on affective content areas such as problem-solving and what New Zealand teachers would term 'pastoral care'. Some teachers were able to link this affective content back to 'life skills'. Most of the classes used a combination of group, small group and individual work; a few used peer learning. A quarter of the classes used publisher-produced materials only, but most used a combination of publisher-produced, non-published and teacher-made materials. Computers were used as part of the instruction in a quarter of the classes.

Teaching patterns

The great majority (61%) of interactions were teacher → learner, only 16% were interactions with the teacher initiated by the learner and 12% were learner ↔ learner. With questions, 94% were elicitations where the teacher asked for factual information; very few were meta-process (critical thinking) or involved choice (agreeing or disagreeing with teacher or learner). Nearly half (46%) of all the teacher evaluation statements to learner responses were affirmations or positive enhancement/clarifications (40%) and less than 1% were negative evaluation statements.

These patterns of interactions led the researchers to conclude that:

> The atmosphere created by predominantly teacher → learner interactions seems to indicate a teacher-centred instructional setting. This is also supported by the high percentage of Product elicitations, seeking factual information and the high percentage of Product responses to the elicitations. Seeking learners' opinions or interpretations rarely happened and seldom were learners asked to think critically or problem-solve... In most classes, very few beliefs, opinions or higher-level cognitive responses were given (op. cit., 32).

As in Beder & Medina's study, the researchers speculate that the dominance of traditional teaching styles was probably attributable to the teachers' school-oriented training and a lack of awareness of alternatives.

Instruction formats

The report considered three major challenges they observed in the nine classes: open enrolment (where students enter and exit throughout the programme), multi-level classes and receiving less than ten hours of tuition per week. The report details the advantages and disadvantages of each of these issues, how they impact on teaching and learning processes and includes interactions and showing how teachers handle them.

As the report did not include any measures of learner outcomes, the authors did not conclude any 'best practice' teaching behaviours, although the discussions still imply that they found some more strategies/methods better than others.

Besser et al. (2004)

The third study was an exploratory study of adult learners' difficulties and included observations of actual teaching in 21 different sites throughout the East Midlands and the North of England. The researchers observed 27 two-hour sessions and interviewed 54 adult literacy tutors.

Although not as focused on teaching practices as the two American studies, this English study's findings resonate with the American findings. They found for example that while there was some teaching targeted on identified reading difficulties, this focused reading instruction "did not comprise a significant amount of the teaching that occurred during the sessions" (op. cit, 8). The researchers concluded that learners' lack of progress is probably attributable to not enough time being spent on reading activities. Furthermore, the teaching strategies being used probably didn't match the range of difficulties that learners have with word identification and decoding. They also commented that teachers did little work at sentence level, comprehension beyond the literal and phonics. Grouping learners with similar skill levels enabled teachers to spend more time teaching reading than in classes of heterogeneous learners.

1.2 Quality of teaching

Because much literacy, numeracy and language provision is not subject to inspection like other educational sectors, there is very little information about how well LNL teachers perform vis-à-vis their counterparts in other sectors, either in New Zealand and overseas. One exception to this is in Britain, where the Adult Learning Inspectorate (ALI) carry out systematic reviews of literacy, numeracy and language provision and has recently published a report that details the generalised observations of 35 inspectors based on a total of 650 inspections (Adult Learning Inspectorate, 2003). The providers included workplaces, *Jobcentre Plus*, *learndirect* centres, community providers and over 100 further education colleges. The report concluded:

> Evidence from inspections of colleges over the past two years shows that teaching is generally much weaker in literacy, numeracy and ESOL than in other areas of learning. The proportion of good teaching is lower and the proportion of unsatisfactory teaching higher than the average across all subject areas. Lesson observations carried out on visits to the sample of 40 colleges show that some of the weakest teaching is in ESOL and in learning support sessions (op. cit., 13).

The ALI report goes on to say that from their perspective as inspectors (based on their multiple site visits, teaching observations, scrutiny of learners' work, programme records and discussions with learners, tutors and managers) effective literacy, numeracy and language teachers plan thoroughly, use an appropriate range of activities and learning materials (especially in terms of their relevance to learners), employ skilful questioning techniques and give constructive feedback. These teachers are able to challenge learners in ways that are not threatening to them, explain tasks clearly, structure tasks clearly and set these tasks at manageable levels that help build the learners' confidence. They include initial assessments in the Individual Learning Plans (ILPs), focus their teaching on the needs identified by these assessments and are specific in the learning goals, which are reviewed regularly with the learners.

On the other hand, ineffective teachers (especially those who have not been trained to teach) ask questions that are too general and fail to set specific tasks that require learners to demonstrate their learning. The inspectors reported concern over a number of the literacy, numeracy and language tutors' own literacy, numeracy and language skills, which inevitably made it difficult for these tutors to teach these skills effectively.

Because of its peripheral location within education, this form of quality assessment of literacy, numeracy and language teaching remains the most under-researched area of the literacy, numeracy and language field.

1.3 Teaching styles

While there is a clear (albeit complex) relationship between the act of teaching and learning outcomes, the evidence on which types of teaching are most effective is less clear. Rather than looking at specific teaching strategies or methods, teaching styles refer to "distinctive qualities of behaviour that are consistent through time and carry over from situation to situation" (Fischer & Fischer, 1979, quoted in Conti, 1985, p. 220). Philosophically, adult literacy and adult education practitioners have tended to promote a collaborative, learner-centred and co-operative approach to their teaching. This teaching style is seen to contrast with more traditional, teacher-directed, authoritarian teaching styles - a teaching style that many LNL learners associate with their own learning failures. Collaborative teaching styles are prominent in adult literacy literature, drawing on theorists such as Malcolm Knowles, Stephen Brookfield and Paulo Freire. One prominent researcher on teachers of adults (Pratt, 1998) has identified five main perspectives on teaching:

- *Transmission*: teachers focus on content and determine what students should learn and how they should learn it. Feedback is directed to students' errors.
- *Developmental*: teachers value students' prior knowledge and direct student learning to the development of increasingly complex ways of reasoning and problem-solving.
- *Apprenticeship*: teachers provide students with authentic tasks in real world settings.
- *Nurturing*: teachers focus on the interpersonal elements of student learning/listening, getting to know students and responding to students' emotional and intellectual needs.
- *Social reform*: teachers tend to relate ideas explicitly to the lives of the students.

While the majority of teachers tend to include only one or two of these perspectives in their teaching in single teaching sessions, most teachers incorporate a number of the perspectives in their teaching over longer periods. However few teachers' total practices fall under a single perspective. Learning contexts and subjects being taught also exert considerable influence on the perspective adopted – for example, running a resuscitation techniques course necessitates considerable transmission-type teaching and few computer teachers incorporate social reform perspectives into their teaching.

While there may be widespread support among teachers for non-Transmission teaching styles, the empirical evidence of its actual implementation and effectiveness is less common. In one American study (Purcell-Gates, Degener, Jacobson, & Soler, 2002), researchers endeavoured to find some collaborative classrooms for comparison with more conventional models of provision. They not only found it difficult to locate such classrooms, but often found that teachers' claims didn't match the reality of how they actually taught.

> We worked very hard to locate more classes in the authentic/collaborative quadrant to better answer our research question, but were ultimately unsuccessful. Often classes would sound collaborative and authentic, only

> to prove not so after direct observation and teacher and student interviews (op. cit., p. 88).

And yet in their initial survey to develop their typology of literacy provision (of 271 providers), the researchers found that:

> A full 73% of the reporting practitioners described adult literacy classes that are teacher-directed and involve their students primarily with activities and texts that are designed for 'only school-type' settings and not for use in the 'out-of-school' lives of the students (op. cit., p. 75).

A review of writing and research about teaching styles (Brown, 2004) concluded that research supports the concept that most teachers teach the way they themselves learnt and because most teachers have themselves been successful in formal learning situations, they replicate this model in their own teaching, irrespective of the context or the nature of the learners. Brown also points out that many teachers resort to known styles because of their lack of awareness of adult learning theory and alternative models.

The evidence on any particular teaching style being more effective than others is both limited and inconsistent. Rachal (2002) for example, carried out a review of research comparing the effectiveness of teaching in an andragogical way as espoused by Knowles and more conventional teaching methods. His findings showed mixed results, with little evidence to support Knowles' andragogical model.

Conti's (1985) study of 65 experienced Adult Basic Education (ABE) teachers (teaching a total of 837 students in GED and ESOL classes) used his *Principles of Adult Learning Scale* to classify the teachers' teaching styles. The test showed that their teacher-centred styles were not congruent with adult education literature. When measured against the students' achievements in the programmes, the GED students learned more in a teacher-centred environment (probably because of the immediacy of passing a formal exam). However with students working at a basic level of literacy and numeracy and the ESL students, the collaborative teachers achieved larger learner gains. The authors concluded that this difference is related to the complex needs of these learners, especially with building positive self-concepts and learning to take risks.

1.4 Teaching methods

An Australian study of literacy teachers (McGuirk, 2001) involved two questionnaires (one for managers and one for teachers) sent to 555 providers offering accredited curricula across the country. A total of 252 were returned – 76 managers and 176 teachers. This figure represents a 14% return rate for managers and 32% for teachers, although the authors caution that this figure is difficult to confirm, given the uncertain nature of the initial sampling frame. Because the questionnaires involved self-report, the study does not give any indication how closely actual practice matches the responses. We have only included the data from the teacher questionnaires as this list matches our purposes most closely.

The respondent teachers were asked to select ten teaching activities from a list of 41 they used most often and then rate their 'top five'. The list of activities in order of preference was:

1. language experience

2. comprehension questions
3. computers
4. critical literacy and numeracy activities
5. creative writing
6. brainstorming
7. whole group discussion
8. small group work
9. cloze
10. pair work
11. demonstrations
12. spelling activities
13. grammar worksheets
14. conferencing
15. read and re-tell
16. genre writing
17. matching activities
18. worksheets
19. puzzles, games
20. problem-solving.

The researchers see these ratings as being consistent with a learner-centred approach, with an emphasis on 'process' type activities. The comparable list for numeracy activities was:

1. using everyday materials
2. problem-solving
3. worksheets
4. estimating activities
5. using concrete materials
6. co-operative problem-solving
7. using calculators
8. demonstrations
9. critical numeracy activities
10. computers
11. small group work
12. puzzles, games
13. vocabulary building.

Asked what contributed to achieving learner outcomes, the respondents mentioned dedicated staff, hard work, learner support systems, administrative assistance and a focus on learners. This study reported that the great majority (93%) of the teachers interview students individually before placement; of these, 57% use a diagnostic screen, 55% a test and 54% other informal procedures such as observation and informal discussions. During the programmes, the most common formative assessments were teacher observation, portfolios and self-assessment. These methods were also the most common forms of summative assessment.

1.5 Qualifications of LNL teachers

The need for literacy, numeracy and language tutors to have qualifications appropriate to the sector and also on-going access to professional development are strong themes in most studies reviewed for this report. Smith & Hofer's (2003) study of 102 literacy teachers in the US pointed out that the poor employment conditions

and demanding nature of the teaching make professional support and training especially important for literacy, numeracy and language tutors.

Also in the US, Bell, Ziegler and McCall (2004) carried out a study to assess how much a group of 208 adult basic education teachers,[6] programme supervisors and co-ordinators attending a state-wide conference knew about the teaching of adults to read. Using the findings from Kruidenier's (2002) review of research on effective teaching, the researchers constructed a *Knowledge of Teaching Adult Reading Skills* (KTARS) test. The test has three parts: *Demographic* (to identify characteristics of the participants such as job type, qualifications etc.), *Direct Assessment* (40 multiple-choice questions on knowledge of adult reading instruction terminology and practices across four areas – alphabetics, fluency, vocabulary and comprehension) and *Self-report* (40 Likert scale items to assess their impressions of the same reading instruction terminology and practices). The *Self-report* section was included because the researchers were interested not only in what the subjects knew and didn't know, but also how their knowledge compared with what they believed they knew because

> …researchers have not only found a continuing mismatch between what teachers know and what research supports as effective reading instruction, but also noted a mismatch between what teachers know and their perceptions of what they know (op. cit., 544).

The mean score for the subjects on the *Direct Assessment* (i.e. what they actually knew) was 19.32 out of a possible score of 40. On the *Self-report*, their scores were similar (120.67 out of a total of 200[7]); that is, they were reasonably accurate in their self-assessments. Although their scores were similar overall, they were very inaccurate in predicting their scores in specific parts of the test. In other words, they were accurate in their overall assessments, but could not identify which areas they knew/didn't know things (their metacognition). High-scoring respondents were more accurate in their self-assessments than low-scoring respondents.

Those who taught at Grade 6-8 levels knew more than those teaching at other levels, including those teaching beginning literacy. Respondents who had received training and had a teaching certificate also scored higher than their non-qualified colleagues, as did certified teachers, those who have received training and those who teach multi-level classes.

The researchers concluded that it is important to directly assess teachers' knowledge in professional development programmes, because participants are not always able to self-assess accurately. They also conclude that "Pre-service and in-service preparation on research-based practices is clearly needed (because) effective teaching of reading requires extensive preparation and that many teacher preparation programs provide inadequate training" (op. cit., p. 562).

McGuirk's study (2001) reported that the great majority of Australian teachers had either a post-graduate qualification or a Certificate in Workplace Assessment and Training. This finding is no surprise, given that many of the organisations surveyed require staff to have registered qualifications. The most common forms of professional development were informal networks, professional reading and

[6] This number volunteered for the study from a total of 650 conference participants. The voluntary aspect probably skewed results in a more positive direction, assuming that less knowledgeable participants would probably not volunteer for the study.

[7] The different scoring scale is due to the use of Likert scale answers in this part of the test.

conferences. Interestingly, many of the respondents were unable to identify any of a list of researchers/authors (such as Freire, Ashton-Warner, Smith, and Gee) as sources of information or inspiration – "the results are somewhat disturbing, as they reveal that many supposedly well-known authors and researchers are unknown, or have had little impact on many respondents" (op. cit., p. 59).

The ALI report quoted earlier expressed concern about the lack of tutors with appropriate qualifications to teach in this area.

1.6 Teacher concerns

How teachers perform in their professional role is in part influenced by the environment in which they work, with their concomitant constraints, demands and related issues. In the case of LNL teachers, there is no career structure or professional infrastructure that is in any way comparable to those found in other educational sectors that enable the recording and monitoring of these professional issues. As a newly-emerging sector, research about these teachers' concerns is therefore a useful source of information about how to influence LNL teachers to review and change their practice.

An American study of 63 adult basic education practitioners included the identification of teachers' and programme administrators' concerns (Bingman, Smith, & Stewart, 1998). Their concerns fell into eight main categories:

- issues of participation: recruitment, retention and motivation
- programme and policy issues, particularly programme structure and funding
- curricula and instruction issues
- assessment of students and measurement of programme performance
- the needs of 'special' students, including those with learning difficulties, teens and the elderly
- staff issues and professional development
- the impact of adult basic education on students' lives outside the classroom
- working with a variety of learners in one class.

McGuirk's (2001) Australian study reported the following issues for teachers (identified as 'extremely significant' or 'very significant' and ranked):

1. pressure to do more in less time
2. access to professional development
3. technology
4. long-term unemployed clients
5. short-term funding arrangements
6. 'youth at-risk' clients
7. reluctant learners
8. increasing casualisation of teaching
9. flexible delivery
10. increasing vocationalisation of literacy and numeracy
11. lack of professional support networks
12. competitive tendering.

1.7 Summary of literature findings

The aim of this study was to gain a broad overview of what actually occurs in a range of New Zealand LNL contexts. The purpose of this brief literature review therefore is

to review what other researchers have documented about what actually happens in literacy, numeracy and language teaching and issues related to this form of teaching. The literature had two major themes.

Firstly, all of the research reviewed points to the importance of the relationships teachers build with learners as an integral component of the sort of learning environment where learners are likely to make gain. Researchers reported that tutors are very learner-centred and supportive in their dealings with students; this attribute is considered to be very important with learners with high levels of need. Conversely, the actual teaching that took place was teacher-directed, with minimal learner input or participation being observed. Researchers thought teachers perceived themselves much more learner-directed in their teaching than was seen happening.

Secondly, a number of reports discussed how provision may not contain as much explicit teaching as learners' needs might warrant, and in particular there was little direct teaching of reading. The corollary is that literacy, numeracy and language teachers need considerably more training and professional development in those core competencies.

2 Research methodology

This observational study is part of a larger research project that has included a literature review of literacy, numeracy and language teaching effectiveness (Benseman et al., 2005) and the mapping of current literacy, numeracy and language provision in New Zealand (Sutton, Lander, & Benseman, 2005). The methodology was therefore informed in the first instance by the findings of the major literature review and then the additional literature review reported above.

2.1 Research instruments

An initial observation schedule was designed based on Beder & Medina's (2001) study (forwarded by the authors), the two literature reviews and our own experiences as literacy teachers. This schedule was designed to capture observations of the overall learning environment of the provider organisations, their teaching rooms, the instructional activities of the teacher, the teaching content and the interactions between learners and the teacher. All of these elements are important to some degree, but capturing them in their entirety is extremely difficult and beyond the resources of this present study. To do so, would require for example extended periods of observation, complete video transcripts and extensive micro-analysis. Nonetheless, we thought it was possible to record the main educational activities in a classroom with a reasonable degree of confidence and accuracy. As an exploratory study, the main intention was to provide a broad overview of how literacy, numeracy and language is taught in a cross-section of contexts and identify possible areas warranting further investigation in future research.

In order to record the above components of the teaching, we needed five main instruments:

1. a brief record of the provider and programme's key characteristics
2. a means of classifying the various components in the teaching/learning situation and interactions
3. a means of recording observations of these components
4. an interview schedule to elicit input from the teacher and one for the learners
5. a means of accurately recording their input.

While we started with the Beder and Medina observation schedule, we decided that it did not cover all of the elements that we were interested in recording, especially in terms of the components of the teaching/learning situation and interactions. We therefore decided to include the following additional classification of activities:

- facilitative processes (e.g. revision of previous session, administrative procedures
- generic teaching methods that are common to any form of teaching (e.g. role plays, 'roving and marking')
- core components of reading, numeracy, writing, spelling and oracy (e.g. alphabetics, vocabulary, fluency and comprehension for reading[8])
- major skill components of the core components (e.g. scanning and skimming)
- the learner activities (e.g. reading aloud, cloze activities).

[8] Based on the work of Kruidenier (2002).

The initial observation schedule and a recording sheet were trialled by all three researchers observing the same lesson and recording their own sets of data for this lesson. These three sets of data were then reviewed and compared for consistency of data recording. The main difficulties were initially centred on devising analytic labels to differentiate between the different levels of analysis possible for a specific activity; for example, learners reading aloud could be related to a range of skills such as analysing and decoding words or scanning and skimming, which then in turn could be related to the broad elements of reading such as alphabetics or fluency, all of which come under the classification of reading. In addition, some activities (e.g. organising a future field trip) were not directly related to any literacy, numeracy and language components and some teaching activities (e.g. pre-teaching) are generic and could be used in any form of LNL or teaching generally.

Further alterations were made to the observation schedule and recording sheet and a second pilot session was observed by the two researchers (Benseman and Lander) who were to do the field work using the revised tools. A final set of recording tools was then devised for use with all subsequent observations. The teacher and learner interview forms were also trialled as part of the piloting process. The key coding sheet for recording is included as an appendix in this report (Appendix A).

2.2 Ethics

The main ethical issues relating to this project have been those of voluntary participation, data confidentiality and anonymity. Appropriate procedures to address these issues were proposed and accepted by The University of Auckland Human Participants Ethics Committee (Reference 2004/243).

2.3 Data recording and analysis

While we endeavoured to record specific data on some aspects of teaching (e.g. direct teaching of LNL, group versus individual teaching, the LNL components being taught), we did not record the specifics of all components (e.g. numbers or categories of questions, or the nature of the interactions as had been done by Scogins & Knell (2001). Rather, we endeavoured to record the nature of the main activities; for example, we noted the types of questions that were being asked, how they were used in the instructional process and who posed the questions. With teaching skills and learner activities, we only recorded the number of times we observed they were used (but not their duration) in order to provide an overview of the range of teaching activities in use.

All the teaching sessions therefore resulted in data sheets that recorded the main activities occurring in the classroom sessions (including verbatim notes of key exchanges where possible) were tape-recorded whenever this was possible (roving teachers were not easy to fully record). These audio recordings were then transcribed and the transcripts used as supplementary/verifying data sources for the manually recorded data. The data-sheet contents were then transferred into an Excel spreadsheet to enable collation of quantitative data. In addition, the tutor interviews were also recorded (except for three that were carried out by phone) and transcribed.

All of the data from the observation sessions was manually checked and clarified (sometimes in the teacher interviews) as soon as possible after the session, the quantitative data was entered in the spreadsheet and tapes sent away for transcribing. Both researchers involved in the observations reviewed each of the sessions on a periodic basis, reviewing the methodology, data recording and

discussing possible themes that were emerging from the observations. These themes were then recorded in a Word file (including additional notes and cross-references to specific examples in the transcriptions and datasheets) and were added to and modified following subsequent observation sessions. The resulting theme file was then fully reviewed several times by the researchers and became the basis for the analysis in the latter part of the Findings section of this report.

2.4 Research procedures

Because the intention was to observe literacy, numeracy and language teaching in a broad range of contexts, we drew up an initial matrix of possible dimensions found in literacy, numeracy and language programmes. The matrix included: types of providers (e.g. Private Training Establishments (PTEs), community providers and workplace), sources of funding (e.g. Training Opportunities, Adult Literacy Learning Pool), types of teaching (e.g. integrated, 1:1, classes) and geographical location (e.g. urban/rural, South/North Island). We were also aware of several other literacy, numeracy and language research studies underway who were recruiting participants, so we liaised with these researchers to ensure that we were not 'doubling up' on providers.

A tentative list of provider organisations that would satisfy the above dimensions was then compiled. The following matrix indicates the range of dimensions covered by the final sample of participants.

Our ref: 10709.00

Table 1 - Characteristics, funding sources, locations and teaching types of observation sample (N = 15)

Characteristics	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**Total**
PTE			●											●	●	3
Community	●			●									●			3
Maori org.					●											1
Pasifika org.								●								1
Polytechnic		●					●			●						3
School												●				1
OTEP						●					●					2
Private company									●							1
YT/TO			●		●									●	●	4
Funding																
Community	●			●									●			3
WINZ	●			●			●						●			4
Workplace						●			●		●					3
Other TEC	●	●	●	●				●		●		●	●	●	●	10
Learning support							●									1
EFTs										●						1
Location																
South Is.					●							●				2
Lower North Is.	●			●			●						●	●	●	6
Greater Auckland		●				●		●	●	●	●					6
Upper North Is.			●													1
Rural														●	●	2
Small town	●			●									●			3
City		●	●		●	●	●	●	●	●	●	●				10
Teaching																
1:1 teaching	●			●		●	●		●			●	●			7
Grp/class teaching		●	●		●			●		●	●			●	●	8
Integrated			●			●			●	●	●			●	●	7
LNL-focused	●	●		●	●		●	●				●	●			8

2.5 Sample recruitment

All of the project participants were initially contacted by phone or e-mail to briefly explain the purpose and requirements of the research. These initial contacts were made to the provider CEO or equivalent. None declined the invitation to participate in the study, although two providers did not have programmes currently running or current ones that met the requirements of the sample. Alternative programmes were successfully sought that matched these providers' characteristics. Two providers in addition to the 15 stipulated in the research brief were also contacted in order to extend the diversity of provision, but both withdrew late in the project due to issues and incidents that were not related to the research study.

Once providers agreed to participate, they were e-mailed a *Participant Information Sheet* outlining in greater detail the requirements for the project and asked if they would like anything explained further. The CEOs were then asked to nominate a teacher for the study, once they had discussed the project with prospective subjects; we specified that we were looking for "a reasonable cross-section of teachers and not necessarily their most experienced or best teacher." In many cases, simple availability and the type of class currently being taught determined the selection of the nominated teacher. Only one teacher declined the invitation to participate; this teacher was relatively new and did not feel comfortable about being observed. Informal feedback in the course of the project also indicated that in most cases the nominated teachers were not atypical; there is no indication that we did not access 'fairly typical' teachers from the organisation participating in the study.

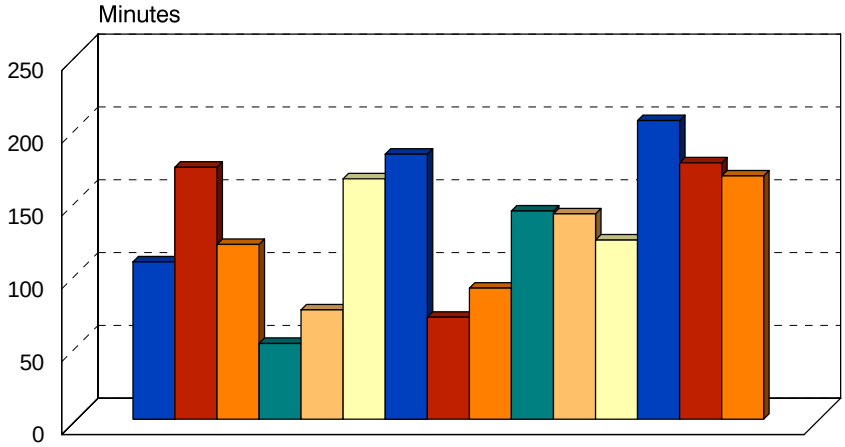
Specific arrangements were then made with the participating teachers as to logistics for the observations. In three cases, it was only possible to observe one session, as specific events or difficulties (e.g. learners not turning up, restrictions on times and schedules with non-Auckland visits) meant that a second session was not feasible.

Where possible, learners who were willing to participate were also interviewed about their perspectives on learning after the final observation. Again, this component was not possible in six cases, because of logistical issues such as learners having to leave immediately after their teaching session. Overall, we decided that the data gained from these learners was of limited value for this study and we have therefore decided not to report them. This is not to say that learner perspectives are unimportant; indeed, we feel that they are an important viewpoint on literacy, numeracy and language learning and one that has been shown to be extremely weak in the research literature (Benseman et al., 2005). Rather, we believe that learner perspectives warrant a study in their own right, where greater consideration can be given to developing an appropriate methodology than we have been able to do in this present study.

2.6 The observations

A total of 15 literacy, numeracy and language teachers were observed for this study during the months of October and November. All of the observations took place at the teachers' normal teaching locations; these locations ranged from community centres to company boardrooms. Six of the teachers were observed on a single day, although most of these observations were spread over several sessions (typically a morning and the afternoon); the other nine involved two different visits. The teachers were observed for a total of 1,963 minutes, averaging 167 minutes per teacher. The total hours for the observation of each teacher are shown in the graph below.

Figure 1 - Duration of observations (N = 15)



All of the participating CEOs, the teachers being observed, and the learners involved in the observations, signed consent forms as per the requirements of The University of Auckland Human Participants Ethics Committee.

Most of the teachers were interviewed after the first session to clarify any issues about what was observed and to supply additional data about their backgrounds and current teaching situations. In three cases, it was not possible to complete the interview face-to-face, so these interviews were done by phone.

3 Findings

The findings section of this study starts with a report on the characteristics of the participating teachers, their organisations, their learners[9] and the main components of their teaching that we observed, followed by a description of the teaching we observed.[10]. The final section then is a summary discussion of key points and themes that have emerged from the study. Where appropriate, the findings and themes are related to the findings of other studies reported in the literature review above and our earlier literature review on literacy, numeracy and language effectiveness (Benseman et al., 2005).

A number of points should be noted in relation to the findings being reported here:

- we start with the background of the teachers, the learners and the programmes before going on to generic elements of the teaching process and finish with the specific teaching of literacy, numeracy and language; this order is used in the sense of a series of concentric circles of increasing importance that culminate with the specifics of LNL teaching
- readers may be surprised by the amount of reporting on 'non-LNL' aspects of the observations; this balance reflects both how much of the teaching in these programmes involves elements that are not specific to literacy, numeracy and language and also how limited the teaching of LNL was in many cases
- similarly, the incidence of the various components reported (e.g. writing vs. reading vs. spelling) simply reflects the incidence of these elements being taught at the time of our observations (we did not set out to sample different forms of literacy, numeracy and language)
- we are not able to make strong links between the various components and teaching effectiveness (for example does the physical environment have an impact on learner outcomes), which would have required extensive pre- and post-testing of learners to examine these types of linkages
- while we are not able to make definitive statements about the incidence of some findings (such as the specific frequency of various teaching methods), we do try to indicate generally how often we observed most of the factors; again, to provide greater detail in this respect would be both misleading and beyond the scope of this study's methodology
- we are providing an overview of what occurs in a cross-section of 15 literacy, numeracy and language teachers; the statements made about these teachers cannot be extrapolated out to the sector as a whole (a larger study would be needed in order to make these statements).

[9] We have used the terms *student* and *learner* interchangeably when referring to the participants; similarly, we refer to *teachers* and *tutors* synonymously.

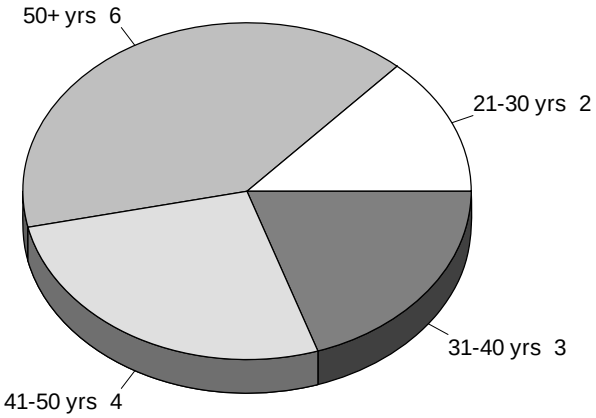
[10] All of the sessions were observed by a single observer, but the text refers to the observer as *we* in a collective sense of the research team.

3.1 The teachers

3.1.1 Socio-demographic characteristics

Only two of the 15 teachers were male.[11] The age distribution of the teachers in the figure below shows that most are aged 40+ years and few are under 30 years.

Figure 2 – Age distribution of teachers (N = 15)



One of the teachers was Maori, two were Pasifika (Samoan/Tongan and Fijian) and the remainder were all Pakeha/European.

3.1.2 Qualifications and experience

As is common in general adult education, all of these LNL teachers have entered this educational sector via 'the back door' (i.e. they have had other career paths previously; there is not an acknowledged career structure comparable to other educational sectors), so it is not surprising that they have a range of educational and professional qualifications:

Of the 15 teachers:

- Five had degrees (three in education, one in linguistics and one in English)
- Five had school teaching qualifications
- Three had specialist ESOL qualifications
- Four had Literacy Aotearoa qualifications
- Three had degrees plus a teaching qualification
- Three only had vocational qualifications
- One had no post-school qualifications

Five of the teachers were currently studying towards a qualification, including a Bachelor of Education (Adult Education), a Certificate in Adult Literacy, a Master of Arts and two Certificates in Adult Teaching/Education.

[11] Because the majority of teachers were female, individual teachers are referred to as *she* irrespective of their gender to protect their anonymity. This practice is not followed with individual learners, as there was a reasonable distribution of both genders.

What is most notable about this list of qualifications is their diversity and the fact that a less than optimal number of the more substantial qualifications (above certificate level) were specific to adult literacy, numeracy and language.[12]

The 15 teachers had been an average of 2.25 years in literacy, numeracy and language teaching (two had more than five years and five had one year or less of experience in this sector).

One notable characteristic of the teachers was their credibility in the eyes of their learners, as manifested in the respect shown to them. Their credibility is attributable to a range of factors: being ex-students themselves, having extensive knowledge about the specialist knowledge being taught (especially workplace teachers), being of similar/same background as the students (e.g. of the same ethnicity, having 'street credentials') and simply being a skilled teacher.

While there are no definitive data available on the characteristics of literacy, numeracy and language teachers in New Zealand, tentative data from our mapping study (Sutton et al., 2005) and anecdotal evidence would suggests this sample is reasonably representative of the literacy, numeracy and language teacher workforce at present.

3.1.3 Professional Development

Given the paucity of literacy, numeracy and language teachers with qualifications specific to this field and the emergent nature of LNL, professional development is an important source of knowledge and skill development for its practitioners. The teachers were therefore asked how much professional development they had done in 2004 (i.e. over the previous 9-10 months). Only two of the teachers had not done any professional development over this period. For the other 13, again there was considerable diversity in the types and sources of professional development reported:

- Tertiary Education Commission-funded workshops (e.g. numeracy, group facilitation) (7)
- Workbase training day (4)
- Australian Adult Literacy conference/course (3)
- Adult Literacy Practitioners Association hui (2)
- University seminar on student retention (1)
- Seminar on trends in vocational education (1)
- Tutor Effectiveness Training (1).

The great majority of these professional development events were of one-, or at the most, two-day, duration. The most notable exception to these patterns were two workplace tutors who estimated that they had attended in excess of 70 hours of professional development, most of which had been conducted in-house within their own organisations. This experience is clearly different from those of the 13 other teachers in the study for whom a one-day workshop is a typical experience.

[12] There have been very few available in New Zealand, but are available via the Internet, especially Australia.

3.2 The programmes and context

The teaching observed for this study was drawn from a range of different literacy, numeracy and language programmes. In brief, these programmes were:

- 1:1 in a community setting, where the content was selected in keeping with the expressed needs of the learners (three teachers)
- 1:1 learning support in a tertiary institution, catering for enrolled students as well as some community referrals
- 1:1 literacy tuition based in workplaces (three teachers, three different sites)
- a literacy module taught within a general vocational programme in a PTE
- a Training Opportunities course catering for a range of literacy needs linked to a school
- a Training Opportunities bridging course based at a marae
- a Training Opportunities computing/business course with integrated literacy based at a PTE
- a Youth Training literacy course based on a marae
- a Youth Training 'feeder' course with an outdoor education orientation (providing integrated literacy) based at a PTE.

Eight of the teachers taught the observed sessions on a 1:1 basis (six of these teachers were observed only with 1:1), three taught in small groups of 2-6 learners and six taught in classes of 7+ learners (one teacher taught 1:1 and in small groups, while a second teacher taught both 1:1 and in a class).[13]

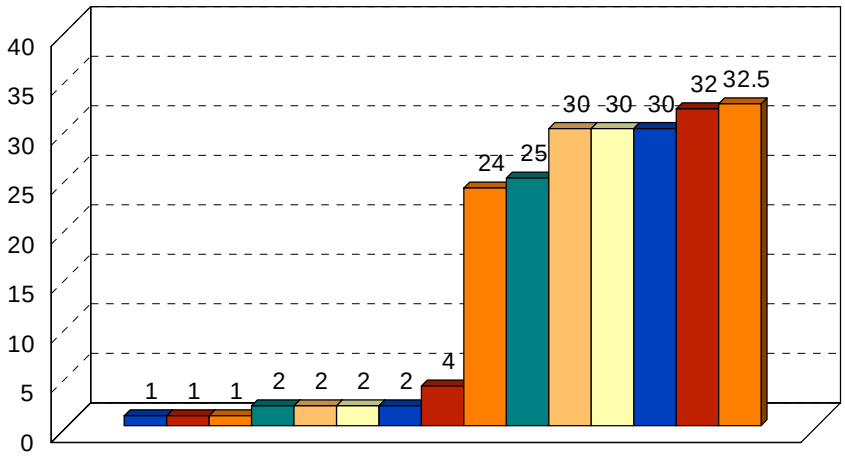
Of the 26 teaching sessions observed, the biggest number (11) had reading as their main focus, four were focused on numeracy, three on ESOL, one on oracy, one on computer usage and the remainder were integrated sessions where the prime focus was on a vocational topic (e.g. health and safety) and literacy was a secondary focus. In terms of LNL components of the observation sessions, six of the sessions had what we considered a secondary LNL focus; four of these were on reading, one on numeracy and one on ESOL.

Most of the programmes were funded through the Tertiary Education Commission (TEC) and two received part or all of their funding through Work and Income. The three workplace programmes were funded jointly by the employers, the TEC and their respective Industry Training Organisations (ITOs). Four of the 1:1 programmes had open-ended enrolment where completion was negotiated between the teachers and the learners. Of the other 11 programmes (including three 1:1 programmes), the average length of programme was 34 weeks (the shortest was 17 weeks and the longest was 48 weeks).

The hours of tuition that learners have available per week on average is shown in the figure below. It is important to note that all of the learners receiving four hours or less were being taught 1:1 and all of those in excess of 20 hours were in small groups or classes; nonetheless, most of the latter were in integrated programmes, so it is difficult to calculate how much literacy, numeracy and language teaching they had available to them versus teaching related to the vocational content of the programme (e.g. office skills).

[13] The international literature reviewed related primarily to classroom teaching, with 1:1 tuition occurring only as part of that provision. Our study is different, with specific observations of 1:1 tutoring in the workplace, in community programmes, as learning support in tertiary institutions and also as additional teaching within integrated programmes.

Figure 3 – Hours of tuition available for learners per week (n=15)

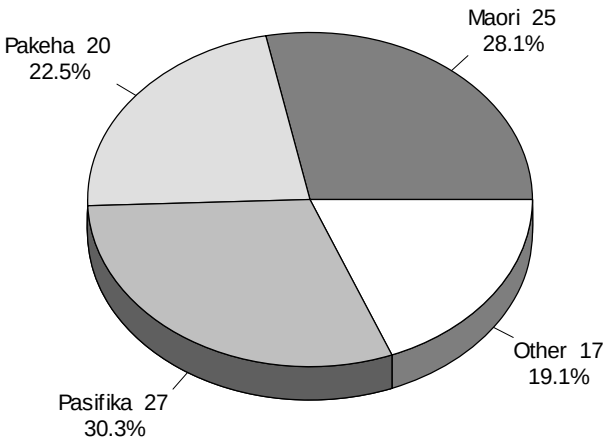


3.2.1 The learners

We observed a total of 119 learners in total; of these, 17 were being taught 1:1 by seven of the teachers. The other eight teachers had a total of 102 learners in their small groups (2-6 learners) or classes (7+ learners) - an average of approximately eight learners in these small groups/classes. Most (68: 58%) of the learners were female and there were 51 (42%) male learners. Approximately one in five (23: 19.3%) of the learners were considered to have ESOL needs and ten had a disability of some kind (one with hearing, one with speech, the rest with unspecified 'learning disabilities').

Of the 89 learners where we were able to identify their ethnicity (some providers did not have a record of this characteristic of their learners), the distribution is shown in the figure below.

Figure 4 - Ethnicity of learners observed (n = 89)



One of the sites had some school-age students in its programme; another provider also had an alternative education programme on-site.

3.2.2 Physical environments

The physical environment (made up of two elements: the architectural facility and the arranged environment) where teaching takes place is often underrated as an influence on the quality of the learning process (Heimlich & Norland, 1994). Clearly, a comfortable and stimulating physical setting is a positive feature in any educational encounter (albeit never sufficient), but one that is usually only partially under the direct control of the teacher. In most situations, teachers have little influence over the architectural facility, but they do have some influence over the arrangement of the immediate environment of the classroom. For many literacy, numeracy and language teachers, the reality is that they are often simply grateful to have access to a venue with even a modicum of resources.

The architectural facilities where we observed the 15 teachers teaching varied considerably. At one extreme were the formal classrooms of the tertiary institutions, with their architecturally-designed environments and range of facilities available on-site – although even though one of these was near-new, it still had restricted access for one student in a wheelchair. At the other end of the spectrum, some teachers were working in cramped rooms in run-down buildings with poor light, bad ventilation and minimal facilities. Because several facilities were converted factory spaces, they are uncomfortably hot in summer and require extensive heating in winter.

One facility in particular had a distinctive (and positive) feel to it; this centrally-located community centre has been (re-)designed specifically as an LNL space (although still not fully completed). It exuded a sense of energy and purpose with a diversity of tutors and learners coming and going, considerable interaction in central areas such as corridors and a sense of acceptance and support emanating from these interactions. The fact that there was both a substantive physical and psychological presence to this facility contributed to this atmosphere. Other, less substantial, venues did not have a ‘presence’ comparable to this centre’s.

Despite the architectural limitations of many of the venues, the teachers had endeavoured to construct comfortable, welcoming teaching spaces for their learners, including sofas for informal seating, a pot-belly stove (badly needed in a setting open to cold southerlies) and students’ work on the walls as decoration. Many of the teaching rooms also had facilities available to make hot drinks and prepare food (students usually spent their breaks either in the teaching room or in nearby tea-rooms – with the inevitable exodus outside for the smokers). Some rooms were primarily designed for other purposes (tea-rooms and a board-room) meant that these spaces were occasionally subject to intrusions such as people coming in during teaching sessions to make cups of tea, although both learners and teachers appeared unperturbed by such intrusions.

One distinctive feature of literacy, numeracy and language teachers in these less permanent venues is their arrival for teaching carrying resource material (such as reference books, worksheets and teaching aids) and equipment (such as cookers for a cooking class) needed for the current teaching session. Several of the teachers commented on the anxiety generated by the need to bring the right material for the current session and how this sometimes limited their ability to divert on to additional topics because they did not have appropriate resources on hand.

Most of the teaching layouts were similar to the drawing shown below, where learner desks were arranged in a U shape facing a whiteboard with the teacher standing nearby during most of the teaching (apart from going round the learners individually

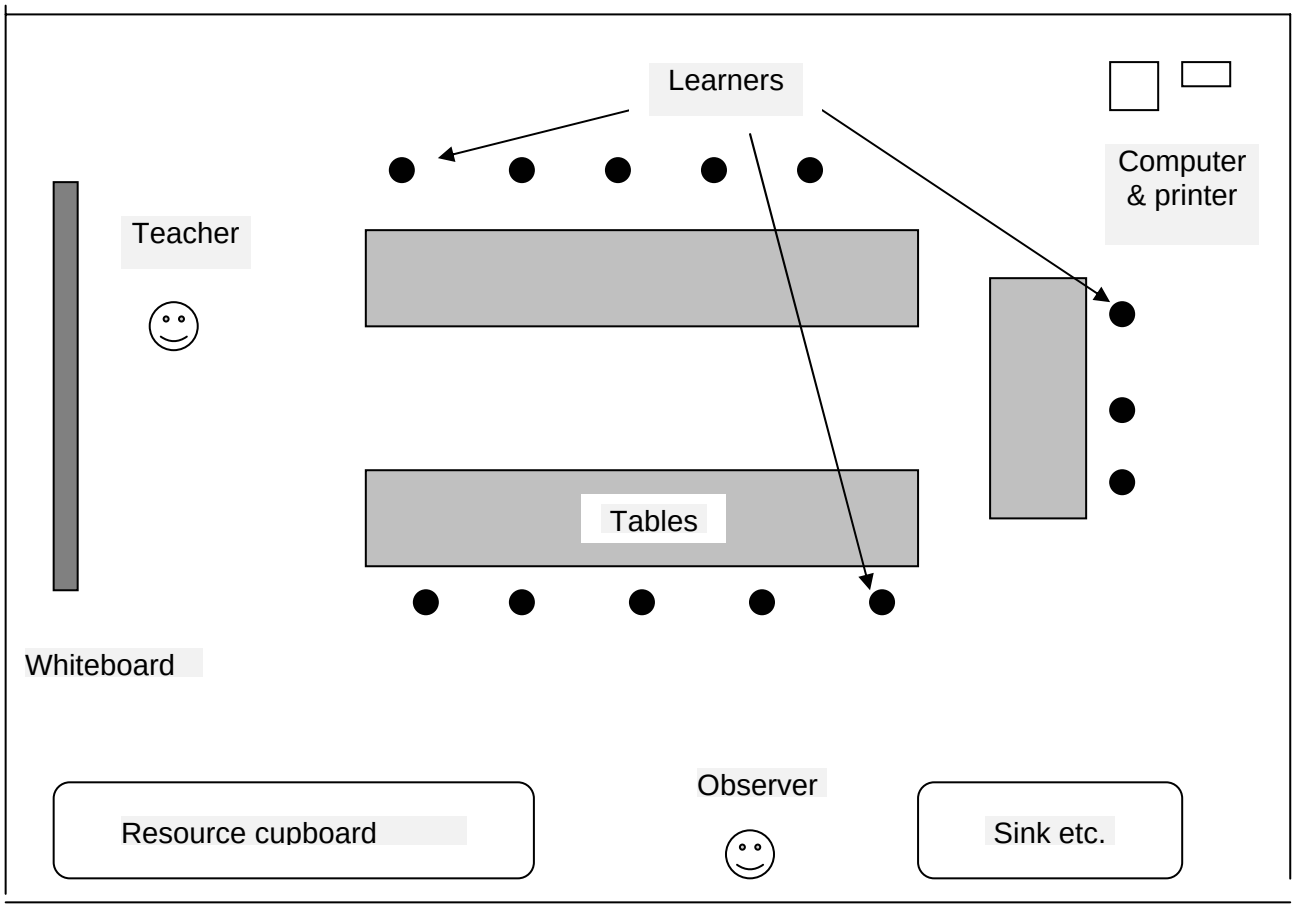
when working on tasks). Teachers see this type of layout as non-hierarchical and most importantly, not formally arranged rows of desks – a formation that is perceived as intrinsically school-like.

All of the teaching spaces also had literacy-related charts on the walls and many had health messages and motivational phrases on posters - one venue also had these prominently posted on the external walls facing the street:

> The only dumb question is a question you don't ask
>
> The greatest unexplored territory is between your ears
>
> 80% of success is turning up
>
> Be a doer, not a viewer
>
> Let the condom roll!

Outside the tertiary education institutions, all of the teaching venues were noticeably inferior to what would be found in other tertiary education settings.

Figure 5 - Typical layout of a teaching space



3.2.3 Teaching equipment and resource material

All but three of the 15 teachers used a whiteboard in the teaching that we observed. In most cases, it was the mainstay of their teaching. The second most frequently used teaching aid was either 'butcher's paper' for groups and classes, or notepaper with 1:1 teaching. Eight of the teachers used some form of worksheet – some were copied out of commercially-produced workbooks and some were constructed by the teacher using local resource material such as newspaper articles. Other teaching resource material included dictionaries (3), TV/video (2), calculators, a grammar book and a car magazine (all 1). Interestingly, in contrast to comparable research in the US (Beder & Medina, 2001), only one teacher used a reading textbook.

Worksheets played a central role in some of the sessions we observed – especially with the less experienced teachers. They were used for a number of purposes: mainly for consolidation of skills already taught, but also for assessment. They also played a useful role in coping with larger groups by creating 'space' for the teacher to work with individual learners. Many of the worksheets were used in relation to unit standards. One teacher commented that she felt that they guaranteed a minimal standard of quality, but another teacher was critical of them because she felt that they did not lend themselves to providing content related to her students' interests. As she said,

> The three students I am working with this morning are interested in phlebotomy, horse massage and the Bible – imagine trying to get worksheets that covered those! [14]

3.2.4 Computers and software

Of the 15 teachers, only three were observed actually using computers in the teaching sessions. The first of these teachers was teaching a learner on a 1:1 basis to use the Internet – primarily how to locate information within web-pages. The teacher had a pre-designed worksheet (*Internet Quiz*) with a series of questions that the learner had to answer by accessing web-sites listed on the sheet. For example:

> Following are a few questions. Type in the URL provided and the information will be somewhere in the site that opens.
>
> What name was the New Zealand far north town of Russell originally known?
> http://www.tapeka.com/russell.htm
>
> Which is the longest bridge in the world?
> http://www.geocities.com/Axiom43/bridges.html

Most of the teaching in this session involved the teacher guiding the learner around the technical aspects of using the computer (locating function buttons, how to type in the URLs, which in most cases came up with the first few keystrokes because previous learners had carried out the same exercise on that computer) and discussing personal links to the content (such as trips they had taken around New Zealand to sites mentioned in the quiz). On two occasions, the teacher suggested

[14] Quotes from participants are reported verbatim, although um's, err's and repetitions have been deleted to improve fluency; T denotes the teacher and L denotes a learner. Additional learners and teachers are identified by numerals – e.g. T2 or L3. 'I' identifies the researchers as 'Interviewer'.

that the learner read some of the text, but these instructions were rather vague and quickly subsumed by discussion about more technical instructions or personal stories related to the web page contents.

T: OK, and then full stop. Now once you type this t, unless someone has wiped the information that address should be in the list. So put in the t and we'll see what we've got. Here we go. Funnily enough, it's the one right on the top. Now to get to that, if you use your down arrow, that will then highlight that on the left and now press enter, and it saves us a whole lot of typing. And then it's taking us to a site on Russell. Now I know for a fact that in here is the answer to the question, so, do you fancy reading out aloud or read quietly to yourself and we'll have a look at it when we get to it?
L: Do I have to read it to you or…?
T: Oh, you can read it to yourself if you like, it's really to find the information. Now this site, working with the Internet, you can tell within… [a small diversion occurs involving learners in a nearby room] OK, now, talking about Internet sites, we were looking over here on the scroll bar, this one tells me that this page is gonna be quite big. There's gonna be quite a lot of information on this site, so just give you an idea, the answer is about, half way down, OK, so, scroll down and I'll just tell you to stop. Oo, oo, off we go, all sorts of writing. I've actually been to Russell once. Screamed through about, 40 mile an hour.

There was only one other interchange in this session where the teacher endeavoured to have the learner undertake an explicit reading task:

T: What do you think the name of that boat is? Let's have a look, make it big so you can read the name of that boat. That's the beggar, oops, here we go, here we go…
L: a
T: OK
L: e, l, l … Belle
T: That's exactly what it is actually, and that would say, Bay Belle, yeah, belle as in belle of the ball, girl type stuff.

The second session involving computers was an office/retail Training Opportunities course which took place in a room where each learner had access to their own computer. Much of the observation period involved learners working independently on a series of tasks off a worksheet using Microsoft software, with the teacher roving to check their work or helping learners with issues arising in their work. At times the whole class gathered in a separate teaching space in the same room where the teacher covered specific numeracy topics (decimals, division). At other times she taught a small group who had difficulties with specific topics while the rest of the class worked independently on their computers. In this way, the teacher was able to focus her teaching on specific students' needs, while the computer-based tasks provided other learners with work independent of the teacher. The third site involving computers was in an integrated class teaching business skills.

Even though we only saw three teachers actually teaching with computers, all except two of the 15 teachers observed said they were able to access computers for their learners. Seven of these locations involved moving into a nearby computer suite (which they usually shared with other teachers and required advance booking), while the remainder had computers available in the rooms where they were teaching.

Three said that their organisations had plans to incorporate computers into their teaching rooms in the short-term. Ready access to the Internet was not available in many cases, but was seen as something to be realistically achieved in the near future. One of the teachers without access to a computer on-site (a workplace programme) solved this problem by bringing her own laptop when she wanted to use one in her teaching. All of the teachers with access to a computer said that they used them, but their use varied according to the nature of the task being taught (and our observations had simply not coincided with these sessions).

The great majority of the teachers said that they only used Microsoft-based and Internet software such as Internet Explorer in their teaching. A few also used learn-to-type programmes and various games, but none mentioned LNL-specific Computer Assisted Instruction (CAI) programmes of the type reviewed in our literature review. Four teachers mentioned that they had access to a few computer-based literacy, numeracy and language programmes such as *Write-on, Maths/Reading/Spelling Blaster, Word Attack* and *Issues in English.* One teacher listed 15 specific computer programmes she had access to, including some of the ones already mentioned plus general computer games (such as the *Carmen San Diego* series) and some literacy programmes designed for children (*The Game and Other Stories*). This provider also had large numbers of non-computerised games and resource material.

Some of the teachers were very specific about what they used the computers for, such as driver licences, doing research (involving Internet searching and writing up the results of their findings) and were aware that "computers don't suit everyone." One teacher said that she preferred "good old [hand] writing" where students initially wrote their work long-hand and then subsequently transferred it on to a computer in the nearby computer suite.

Asked how they used the computers in their programme, another teacher gave this explanation:

> T: Yes it gets used, yeah usually there's a list on the board and people can get up to use that computer, though we have a computer suite across the hallway with three other computers in it. That came up at our meeting [with the learners] to do a timetable for the use of that computer room and we tried to encourage people to work on the computers for half an hour three times a week as part of the programme and that's where it's good if they've got a piece of writing to process. I always like to have them getting some kind of writing.
> I: So they're using it as a word processor?
> T: Yeah, usually, there's no Internet access on those computers, if people need … we used to have computers which sort of opened further with Internet access with some filters and that didn't turn out so well, so we filtered it to supervised access to the Internet for people who were searching for a certain topic and we do it.
> I: So you don't have any maths software or literacy software?
> T: Yes, yes we do. We have, and people will use those kinds of things. That tall young man in particular, likes to use the games, I'm not actually that familiar with the games, because I don't do a lot of work with them, but we've got a reasonable stack of maths games, grammar, vocab and spelling games, those are the things on the computer. I don't use them much, but we do have a lot of people who worked with their driver's licence, and we support them in that by supplying road codes, test sheets and the CD, the road code. So they will spend time using the CD and familiarising themselves with

that, the stuff that's in the road code - quite a few people were spending quite a bit of time doing that and that's all literacy stuff so yeah.

3.2.5 Open enrolment and diversity of learners

Four of the seven small group/classes operated open enrolment procedures which essentially means that there is a 'rolling' student clientele; as learners withdraw, get jobs or move on to other educational programmes, they are replaced by new enrolments. Scogins and Knell (2001) reported that teachers in their US study identified open enrolment as one of their three main issues.

Overall, open enrolment did not seem to cause these teachers undue concern:

T: Our courses are 24 weeks long, so we have two a year and people can join at any stage during, during the year.
I: How do you find that?
T: With having a maximum of 10, I don't mind. That is fine, because sometimes if there is a job that somebody's going to, then they could be here for perhaps six or seven weeks and that is the right time for them to go, if a job comes up. This doesn't happen quite so often in this area, because most of mine go on to further training.

While the teachers coped with this issue, they would prefer not to have to deal with it; but the pragmatics of funding meant that they need to incorporate this factor into their initial recruitment.

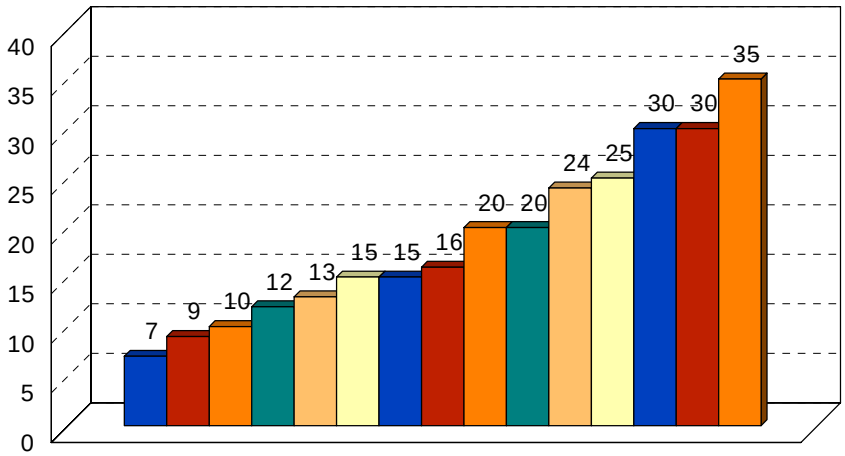
T: [explaining how her programme works] … but where it's not so good is that it's hard for people to come in at different points of it.
I: Which is why you're quite strict about accessing them and slipping them in if they came in?
T: Yeah, that's right … Yeah, and so what I try and do too, is start with a bigger group at the beginning of the year, load the group up - and then as people do drop off.
I: Natural drop-offs.
T: Natural drop-offs, you've still got eight left at the end.

Most of the classes had a diverse range of needs within their groups of learners. One class for example had students relying on finger-counting for their numeracy tasks through to students working on volcanic eruptions based on NCEA Science material. This class had two teachers who essentially managed their class as a series of individual learners, resulting in considerable 'plate-spinning' where they constantly moved from learner to learner, teaching and checking and then assigning further tasks to complete. This class spent minimal time as a whole group for teaching purposes.

3.2.6 Workloads and preparation

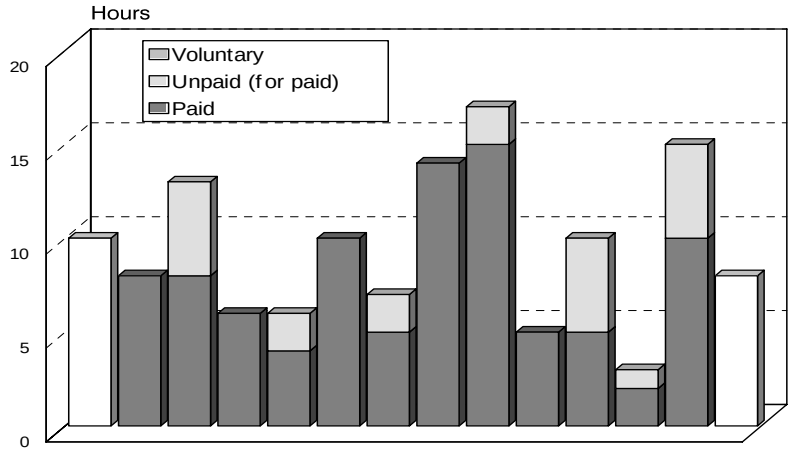
The distribution of their average weekly teaching workloads is shown in the figure below. The most striking feature of the distribution is the diversity of workloads among the group.

Figure 6 - Average hours teaching per week (n = 15)



Each participant was asked to estimate how many hours they spent on average preparing for their teaching and how much of this time was paid or unpaid. Most found it difficult to estimate, because of the variations in the content of their teaching and other factors. Even when pressed, one teacher could not estimate a figure. Several said that their preparation time was not specified in their contracts, but simply "factored into the hourly rate" that they were paid.

Figure 7 - Average amount of time per week spent in preparation (n = 14)



3.2.7 Constraints and learning outcomes

Probably the teachers who felt least constrained in their teaching were those working in community-based organisations.

> No, I have no constraints at all. I can try anything I like, because you're meeting that individual's needs.

On the other hand, the workplace teachers were very aware of their need to satisfy the employers (part) funding of the programme – "productivity is always the bottom line here" – although several also acknowledged that they enjoyed a reasonable degree of autonomy and flexibility in their work.

The other major constraint that the teachers identified was the need to achieve a certain level of unit standards or other outcomes (usually employment or scaffolding to another course) in order to satisfy funding requirements. Several teachers said that for all the problems with unit standards, they also felt that there were a lot of positive aspects to them, especially in giving learners a sense of achievement and acknowledgement of their skills – often for the first time in their lives.

Teachers whose programmes involved achieving these outcomes were somewhat mixed in the degree to which they felt pressured to achieve the standards. A few said that they felt 'driven' by the unit standards, with very little room to follow alternative topics or dwell too long on those that interested their learners for fear of "getting behind." Some teachers were certainly aware of this pressure, but still did not feel unduly restricted by it. Both of the following comments come from teachers running Youth Training programmes:

> T1: I don't feel too constrained. Sometimes I think maybe being a slave to unit standards can be a constraint that we try to keep them meaningful and they relate to what people are doing and have some kind of practical application. There's a pressure for people to put all these unit standards and that sort of thing, but it's actually quite good 'cause there are a lot of very relevant unit standards out there and I suppose there isn't really that huge pressure on this program. We do have to get a certain core of them, to get people through. The other thing I suppose - it's not really a constraint on the teaching. It's a frustration in a sense that the outcome system for programmes is quite frustrating. When you put all that effort and energy in to someone and you know that they have come such a long way because they've decided they've wanted to basically …, but then two months after they do the course, if they're not in another programme, or if they're not in a job, then they're not an outcome for our course. Whereas they're improving in their quality life and their ability to be in the community, all those kind of broader literacy things have improved for them tenfold, you know, immeasurably, that is a definite frustration. I don't know who constrains, but we just try to do it anyway, it's not just literacy and maths, it's that whole picture.

> T2: I think probably one of the main constraints is the fact that we are outcome-based and the outcomes for many of these learners is good, but unrealistic. I think that, for some of them, they have had to do such a vast turnaround in actually coming to a course, you know socially, some through drug, alcohol issues etcetera, which all sort of impact on why they're not at school. But that part is not really taken into consideration, you know, for some of these people, it's going to take a lot, lot longer. I mean we do have some freedom in that, but the actual going and sticking at a job or a course, yes sometimes is a bit unrealistic. And also in the way that for some of these, they are the first one in their family to actually have stepped outside that area of benefit dependency and you know, the different dependencies. I think it takes a bit of courage because often there is a real type of war outside between all those different issues you know. But you know, they are the ones who turn up regularly and my ones aren't too bad. … I suppose in many ways I do try and challenge them to look, you know a bit higher.

In one session, there was an example of how a unit standard restricted the direction of the teaching/learning. In this session, the (Chinese) learner was completing a unit standard requiring the comparison of communication barriers between two cultures. The teacher had suggested that he compare Chinese and Pasifika people, but the discussion centred mainly on differences between Chinese and Pakeha, because the learner found this comparison more useful. After a while however, the teacher pointed out that the unit standard had stipulated a Chinese/Pasifika comparison:

> T: So I think if we write that one down there, it might not be completely accurate as far as I don't know that we've sort of got things mixed up a little bit there.

So she brought the discussion back to the latter, even though the learner clearly preferred to discuss the Chinese/Pakeha comparison and he found it difficult to identify Pasifika-related issues:

> T: Got hard, hasn't it to come up with …
> L: Mmm.
> T: Especially 'cause I can't help you that much, you're the only person that's chosen Samoan, 'cause the others have chosen either Chinese or …
> L: I can't do Chinese [both laugh].

Another constraint mentioned by several teachers was the need to be proficient in a broad range of subject areas that were on the fringe of, or beyond, their personal interests or expertise.

> I enjoy it, but sometimes it's a challenge, all the different things that they are doing and when it's sort of beyond my knowledge base I can find that difficult - you know, like physics and things like that. When someone's doing that - the man that works with people in physics, he's here on a Thursday afternoon and a Friday morning, so sometimes I have to wait, till he gets here 'cause I'm not a fifth form science teacher you know.

Or, in other cases, teachers felt restricted by their knowledge of some literacy, numeracy and language components (usually maths).

> [A teacher reflecting on a session] It was metres cubed, to convert into litres and I wanted to find her a rule for that, 'cause off the top of my head, I don't know that, because maths certainly is not my strong point.

It should be noted however, that the teachers observed (especially those teaching in workplaces) also demonstrated impressive specialist knowledge necessary in order to teach contextualised or authentic literacy, numeracy and language (e.g. from intricate details of manufacturing processes through to detailed knowledge of learners' families and their interests).

3.2.8 Multiple teachers and teacher aides

One British study (Brooks, 1998) reported having additional teacher help as one of three factors in effective literacy programmes. We observed three situations where there was more than one teacher involved in the teaching. The first was a workplace programme where, following the no-show of an individual learner due to work

demands, the two teachers decided to organise a small group session where all three learners had ESOL needs. Because the content (team-building) was relatively unfamiliar to both teachers, they decided to teach the session jointly.

While one teacher clearly led the discussion in this session, the second teacher was also very active; in particular, she sought to involve one particularly quiet participant and would add to the discussion by asking supplementary/clarifying questions and directing several questions at him specifically. Even though the topic for this session (team-building) was one that neither teacher had taught previously, their dual presence maintained a noticeably higher level of momentum in the discussion tempo – when one teacher hesitated, the other would (re-)enter the discussion and maintain the discussion with an additional question or content.

In the second class with two teachers, one was the lead teacher (and course co-ordinator), who undertook most of the assessment and administrative duties, while the other was the literacy teacher being observed. Both teachers worked with individuals or sometimes groups of two or three learners.

The third multiple-teacher situation we observed was an integrated class, where a literacy teacher worked alongside a vocational teacher. The stated aim was for both of them to deliver vocational content and support the students to develop their literacy skills in that context. How that would take shape depended on the learners' needs and course content. In the first session we observed, delivery of the vocational content fell in the main to the vocational teacher. The literacy teacher's main role was as an 'advocate' or 'interpreter' for the learner: to intervene when it appeared that learners did not understand the content from the vocational teacher, to encourage learners to interact and ask questions, to develop students' vocabulary and to model note-taking. Following the input, the literacy tutor intervened to ensure the instructions on an activity set by the vocational tutor were fully understood, and then roved the classroom asking, "Are you alright?" and assisting learners to get on-task. Both teachers then worked with individual learners to practise tasks they were to be assessed on, offering positive feedback on what they did well and pointing out what they had missed.

In another session, the same literacy teacher provided an opportunity for students to write their learning goals, and then went round checking if these goals were both specific and achievable. Following this exercise, a free-writing session was used as an assessment of progress. The vocational tutor then joined the class, while the literacy teacher continued with the group on a session about how to write e-mails. Several learners later reported that the personal support they received and the literacy teacher's efforts to build their confidence were critical to their staying on the course. The literacy teacher also acted as a teacher's 'assistant': handing out worksheets, moving the video and TV, helping the vocational teacher log on to her computer and undertaking an administrative task around assessments.

3.2.9 Learner issues and crises

The teachers reported that coping with students' issues and crises is an integral part of literacy, numeracy and language teaching - it 'comes with the territory', as one teacher explained:

> T: Monday mornings can sometimes be absolutely diabolical, all depending on what has happened over the weekend. Sometimes we can actually spend quite a chunk of the day just sorting out, you

> know social problems even sometimes, just where things that have happened outside the course because someone has taken a dislike to somebody, the old gossip … It can impact quite a lot so yes, if something, I mean, this morning they were quite happy to carry on and get those things finished, then I will stick up for them if I think they're getting a raw deal, but I won't tell lies. So if their case worker rings up and they're not on the course, then that is exactly what I will say. But you know, I think that they know that they can come and talk and if there are things that I cannot deal with or I think they're in a dangerous situation then I will actually say to them, 'we need to talk to somebody else, we need to talk to our social worker' who comes in once a week. Those sort of things, but I think also, the fact that I have them as a full-time course means that there is a little bit more freedom in how things could be arranged, so if something is just not going well in the morning there often is a time in the afternoon where we can slot something in. And that I think actually works quite well.

While providing such support can be demanding, this element also provides much of the satisfaction that the teachers derive from working in this sector.

> T: I just love it so much, because it's like the kind of camps you go on, like when my daughter went on a whanau, a Maori studies camp, it's a bit like that, it's creating that family environment that perhaps a lot of them haven't had and honestly, it's an immense privilege, yeah, that's the bottom line for me. It's a privilege to work with these girls.

We observed several examples of how learners' daily lives and issues 'intrude' into the programmes, requiring diversions from planned activities.

In several cases learners' issues took precedence in the teaching for that session. One Pasifika learner in his 40s arrived for his weekly 1:1 session somewhat distracted by a letter that he had recently received from the Department of Courts. He was not at all confident about what the letter required of him and was uneasy. The teacher read the letter with him, explaining that it was a call for jury duty. He explained his anxiety about not being able to carry out the duty because of his poor English skills, so the teacher then composed a reply, in consultation with him to obtain an exemption. This task of the teacher writing a formal letter for him to take to Court after the teaching session took about 20 minutes of the hour-long teaching session.

Another learner in a workplace programme was somewhat lethargic in a session observed from 1-2 pm; he had started his shift at 1 am that morning and was due to do a further two hours of work after the teaching session.

In all of these cases, the teachers were clearly aware of the issue, its implications for that session and endeavoured to help resolve it where necessary without the issue totally dominating other concerns or other learners' activities. The extent and seriousness of some of the issues arising[15] does call into question where teaching ends and social work begins, but feedback from the learners interviewed for this study strongly indicated that they value this part of teachers' behaviour.

[15] Not necessarily the ones listed above, but other incidents and issues that teachers recounted. For example, one of the teachers related how she has provided accommodation in her home for her students at times of crisis.

This aspect of literacy, numeracy and language teaching was seen by some of the teachers as both inevitable and distracting to achieving literacy, numeracy and language outcomes.

> T: It's very unpredictable and you never quite know what's going to happen.
> I: Even though the structure is there?
> T: Yeah, I think what's difficult sometimes is what happens in people's lives, you know? Tragedies and you know people can get upset, so it's more unpredictable than working, say, in another setting, even, in here [a tertiary institution].
> I: It's actually one of the challenges to the job, dealing with the personal stuff?
> T: Yeah, and I have had tutors work in the community and found that too difficult to cope with because there's a lot of emotional stuff that can happen in there. Not everyone wants to deal with that. … Challenging, and sometimes, sort of linked to that are the disabilities. I think, like there's one woman who still hasn't come back, whose got a mental illness and you know, she wants to come and then she comes for a day and then she can't get back to it, so that's very challenging. These things are going on in people's lives. One man who wasn't there today and gets in trouble with the police and so there are some days he's probably in jail. That's a challenge, the attendance and today was a bit disappointing, but usually that group, if they can get there, they'll be there.

There were also instances that demonstrated the degree of support that students show for their fellow students in times of need and crisis. In one case, there was a lengthy discussion at the beginning of a lesson about a student who had been absent due to a serious illness and for whom a prayer was offered by the class members.

3.2.10 Learner withdrawals and no-shows

Learner 'no-shows' and late arrivals due to incidents in learners' lives were reasonably common. For example, one learner arrived late for a class because she had had to visit her doctor and social worker about an issue that had arisen that morning; another was late because her childcare arrangements had fallen through at the last minute; a third learner missed most of a session because he had a hangover and had slept in.

Teachers reported that they found 'no-shows' more frustrating than complete withdrawals because they meant that as teachers they usually lost momentum with their learner's progress, especially if they were scheduled for only one or two hours tuition a week. For example, if tuition is only once a week and a learner misses two consecutive sessions, they would effectively not have had any teaching for three weeks. Teachers said that they found it extremely difficult to make an impact with learners with very erratic attendance patterns. While no-shows are frustrating for all teachers, they are especially so for those who teach 1:1. Late arrivals of individuals for classes are an additional issue for teachers of groups; most briefly acknowledged these learners and then once a task was set, would then bring them 'up to speed' with the current work.

No-shows are also a source of personal frustration for the teachers. For example, one teacher being observed was scheduled to have three learners between 9 am and noon. Of the three, only one learner turned up, he was 40 minutes late and only stayed for 33 minutes of teaching. This learner had only been for one session previously and the teacher was anxious that he made sufficient progress to whet his appetite to return for further sessions. As an experienced teacher, she chose an activity that would fit into the limited time available and also provide him with a sense of accomplishment – as this teacher said in her interview, “It’s always about how I can make it meaningful for them.”

While this incident was due to the learner having transport difficulties, in other cases the no-shows are due to factors over which neither the teacher nor the learner had much control. In workplace programmes for example, peak production periods mean that learners are often unable to attend sessions because of the increased work demands. At one site, the teacher had to ring through to different parts of the factory for four different learners before she was able to locate one who was available following the no-show of a scheduled learner who was needed to cope with an unexpected work demand. This teacher’s intimate knowledge of the factory, its work schedules and the circumstances of each worker meant that she was able to minimise this issue.

It should also be noted that in the case of a few 1:1 teachers, no-shows mean that the teachers would not be paid for their time even though they are present at their workplace, as their pay is dependent on actual completion of teaching sessions. With their poor professional status and matching pay-rates, no-shows are simply another factor that frustrate these teachers and encourage them to look elsewhere for more secure employment.

3.3 Generic teaching elements

Originally we had anticipated that the prime focus of our observations would be on the teaching activities around the particular needs of the learners in relation to LNL – how reading was taught, how LNL was integrated into vocational programmes and so forth. However early on in our observations, it became clear that we had under-estimated the centrality and importance of the more generic aspects of teaching (that are common to any form of adult education) and how influential these components are in shaping what happened between teachers and learners. For this reason, we have included a separate section on a number of generic factors that we see as pivotal.

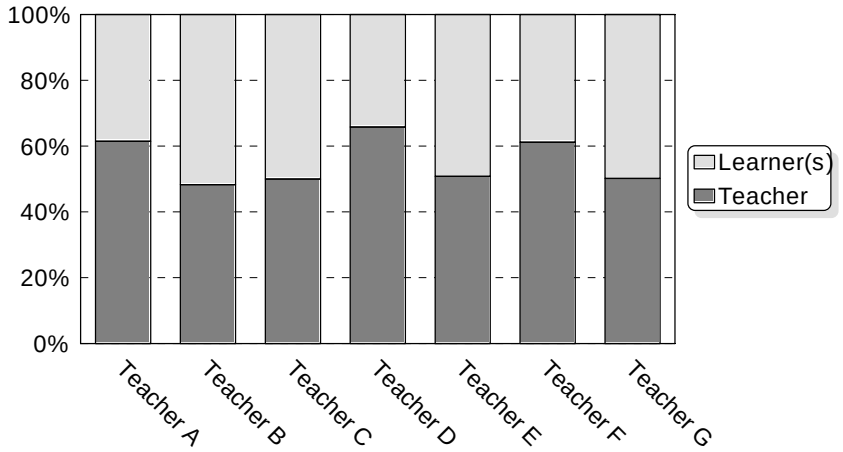
3.3.1 Patterns of learner and teacher participation

In some small groups and classes, there was a wide variation in the amount of participation in activities (especially in response to non-directed questions and discussions) among the learners. For example, in one small group of three learners, one learner probably generated at least 70% of the responses, the second learner approximately 20% and the third learner only about 10%. When the first learner left the session early, the other learners then became more involved in the discussion, although the split was still about 70/30. The teachers were aware of this issue, explaining afterward that this person usually worked 1:1 and was not used to working in groups.

But there were also variations among the teachers in the proportion of time that they were speaking compared with the learner(s). We analysed the distribution of teacher

versus learner contributions in the seven sessions where we had been able to transcribe most or all of the teaching interactions. The graph below shows the distribution of teacher/learner participation analysed from these transcripts. The teachers include both 1:1 (five teachers) and group/class situations (two teachers). The graph shows that teachers talk on average about 50% of the time and in some cases as much as two-thirds.

Figure 8 - Teacher versus learner participation in sessions (n=7)



Further analysis of the transcripts showed that most of the learner proportions err somewhat on the generous side as they include quite a few simple 'yes' and 'no' type answers, whereas very few of the teachers' responses were of this type. The average number of lines of text generated by the teacher was four; the learner's was well below one line.

Below is an example of teacher-dominated exchange:

L: No …
T: Sorry, going too fast. So to communicate is to understand somebody, and you could do it with your body, if you go…
L: Mmm …
T: Yep, or you could do it with words, verbally, that's a verbal. Like I could say, 'Oh, hi [name], how are you, are you having a good day?' You go, 'oh yeah, good,' that's just verbal communication, that's like understanding someone using words and then non-verbal is like the body language, like a wave or a smile, and then another way is to write. So if I was your wife, I might write, 'oh [name], can you please pick up the children after school?' That's a way of communicating with you as well, so you can do it verbally by talking or non-verbally which is body language, by smiling and waving, and you can do it by writing. So there's kind of three ways of communicating. There's probably more, but they are the main ones. Yeah, so, it's getting someone to understand you, I suppose. Does that make sense?
L: Yes
T: Yeah, it's probably a word that you won't use much, but it's something that you do everyday. You communicate with people every day. So when we did that listening, you were communicating. And you know, how you were using good body language, like smiling, nodding, that was your non-verbal communication. And I

> remember, we, I think we talked about it that, you can tell a lot from someone by looking at them. If you sat like this, looking really angry, you don't have to say anything but I know that you're in a bad mood. And that's all non-verbal communication. So what they want you to do there is, they want you to pick a culture, different from your own culture, so I think Palagi is probably a good culture 'cause it's different, yeah.
>
> L: Yeah.

Overall, the patterns of participation and the extent of teacher direction interaction we observed were similar to those described in the international observational studies we reviewed.

3.3.2 Learning environment

While teachers are often not in a position to drastically improve the physical environment in which they work, they are central to creating and maintaining a positive psychological environment. Heimlich & Norland (1994, p. 87) argue that:

> [Teachers] have the potential to destroy the environment for learning at the drop of a hat. The learning environment can be a powerful teaching instrument at the disposal of the teacher, or it can be an undirected and unrecognised influence on the behaviours of both teachers and learners.

This assertion was also confirmed in the literature review (Benseman et al., 2005, p. 10).

We felt that all of the learning environments we encountered in this study were positive and supportive and that learners were treated with respect and support. We observed no overt conflict or sustained negativity. While it could be argued that the short duration of our observations precludes definitive statements in this respect and our presence as observers could have had some influence on the interactions, we believe on the other hand that positive learning environments cannot be artificially contrived - even for a short duration. This is not to say that they are necessarily maintained unproblematically or invariably over the longer term, but we do maintain that all of the teachers have been able to construct positive environments that are conducive to achieving a positive impact on learners.

While few people would dispute that a positive learning environment is important, there is less consensus about how effective teachers go about creating such an environment. Dirkx and Prenger (1998) argue that safety and trust are key to achieving this goal. Below is a list of some of the teacher behaviours that we observed and think contributed towards building this learning environment of safety and trust:

- being open and inclusive about their own backgrounds, interests and families
- casual, 'non-school' behaviours - always using students' first names, casual dress codes, routines approximating those of adult contexts
- relating to students' individual interests, personal circumstances and experiences
- creating situations for learners to exercise autonomy
- injections of humour ("synonyms – and that's not the stuff you put on doughnuts, OK?")

- authenticity of learning environment (e.g. workplace) and tasks.[16]

Often, even a brief interchange would convey a sense of the teacher being aware of the learner's broader life and an empathy with it, as shown in this exchange at the conclusion of a session:

T: Good on you [name], that's good. It's working.
L: Yeah
T: Yeah, yeah, cool. So what are you doing for the weekend?
L: Oh…
T: Any hot dates?

It is interesting to note that in two of the Youth Training (YT) programmes, some of the younger learners referred to their teachers as 'Mum', which is clearly indicative of their respect and trust for these teachers.

The only incident we observed reminiscent of formal schooling was where a YT class finished their work unexpectedly early and were required to stay on-site for approximately 45 minutes until they could leave for the day. While this behaviour is required by the funding body and is justified by the programme administrators as being "how it is in the real workplace," it did have a feel about it of 'being kept in'.

In one interview, a teacher explained how she set out to achieve a positive learning environment:

I: Do you spend much time at the beginning of the year sort of setting up a particular learning environment, getting group cohesiveness?
T: Yeah, we do, you take it slower, it goes much slower at the beginning. People do introductions and then that cuppa tea time is longer at the beginning, so people sort of have a chat to each other, it was sort of a bit rushed today, but often there's time there for them to interact and I actually often leave them to it, so they start talking to each other.
I: To each other, rather than interacting with you?
T: That's right, so it's all those little things and people often arrive a bit early and they have a chat and they talk to each other, so, those things are happening around it, yeah, but usually the group, they, they get quite close in some ways, and some of the women, they ring each other up now, the older ladies and they go out on little trips together some times. Occasionally that happens.

Creating a supportive environment means that students feel free to bring up issues 'on top' which is not only personally supportive, but also helps 'clear the way' for more effective teaching.

I: So you do integrate other activities even if they might not be related?
T: Yeah, I think that everything is related, you know, like even like when we were at [location] on camp, a lot of it was group skills, social skills, all those kind of skills, which don't really feature in the literacy and maths equation. Often if people find being in a group hard, then it'll be difficult, but once they are accepted and they feel a sense of acceptance of being who they are within a group, then the

[16] These elements are consistent with Benseman's (2001) study of Training Opportunities teachers.

likes of our programme, then something shifts in them, and they can learn in a way that I don't think they could perhaps before. Because they didn't have that sense of belonging or something like that. Like one of the women, she suffered since she was five years old from [condition], which is hair-loss, with women, and she often wore a cap so you didn't see her hair. When she first came it was quite patchy and she sort of had bald patches, and she had quite short hair, and I noticed that when we were in the pools that, she's got, hairs growing all over her head. And I said, 'your hair its growing back,' and she said, 'yeah, it's because …' I wish I could remember her exact words, 'it's because I'm on the course and I'm learning new stuff,' and I said to myself, 'gosh, if what we're offering, what we're providing here, if I could claim that credit too …' You know that it was helping her hair grow back because she attributed it to trauma in her life 'cause a lot of people who come to us have suffered immense abuse and trauma, so if we can make a difference like that.

I: So part of what your role is as a tutor is to create that?

T: Yeah, and often I find too, when I'm sitting with students, before they settle down to do work like maths or whatever it is, they'll sort of off-load a little bit, what's on top for them, that might have been something in their childhood or it might have been something that happened last night. And often sitting alongside someone and being there and listening - I think is like a fundamental thing for me anyway and the work I do. It really facilitates something for them, so that they can then move on and work on that maths because that's been hurting and sometimes it's issues people might need help with, they might have a form from WINZ that's been really worrying them and they can't fill it out, and I say, 'we'll work on it,' you know, 'I'll help you with it.'

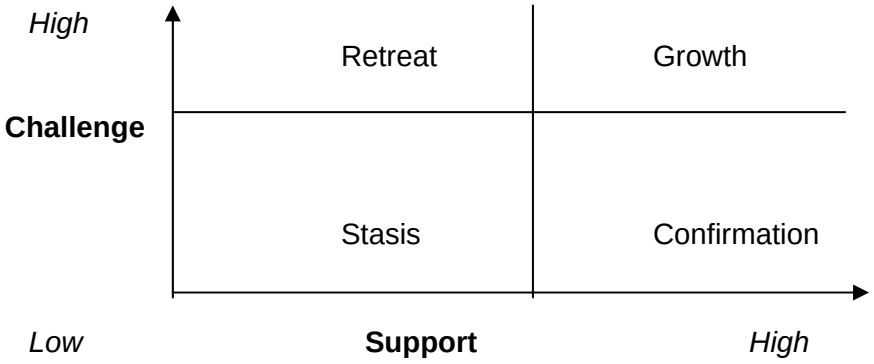
So it's sort of filling the gaps, and it's that whole broader picture, helping people who have I think been, haven't felt empowered to participate in the community, to you know, to help that sort of thing happen I guess. If people have got major issues then we have professional counsellors that we have access to and very quickly we can refer them, if I can see it's a bigger issue, then I'll say, 'do you think you need talk to [counsellor] about that?'

3.3.3 Balancing support with challenge

While there is little doubt that these literacy, numeracy and language teachers offer considerable support for their learners, this support needs to be balanced by also challenging learners in order to promote learner gain.[17] The tension between support and challenge has been well explained by Daloz (1999) who stresses the importance of achieving a delicate balance between supporting and challenging learners as shown in the diagram below (op. cit., p.214).

[17] This tension is sometimes expressed in terms of cognitive vs. affective domains of learning. The affective domain includes values, attitudes, beliefs, emotions, motivation and interests, while the cognitive domain includes all intellectual processes: comprehension, recall, application of principles and analysis and is often related to Bloom's six-level taxonomy (Cranton, 1989).

Figure 9 - Daloz' concepts of challenge versus support



Daloz defines *support* as "the activity of holding, or providing, a safe space where the student can contact her need for fundamental trust, the basis of growth" (op. cit., p. 209) and *challenge* as "opening a distance in the relationship, drawing the student outward to fill the gap, straining him to move, to accommodate his inner structures to the new environment created by the mentor's[18] distancing" (op. cit., p. 216). He argues that support and challenge need to be kept in a careful balance in order to promote learning and personal growth. "If both support and challenge are low, little is likely to happen ('stasis'). Things stay pretty much as they are" (op. cit., p. 208). Too much challenge in the absence of appropriate support on the other hand, can drive the insecure student into 'retreat'. But he also argues that a high level of support without a commensurate amount of challenge (as found in some highly student-centred programmes) also amounts to little long-term impact ('confirmation'). A delicate balancing of the two factors on the other hand, can provide substantial impact on learners ('growth').[19]

The need to extend or challenge their learners can be seen in the following excerpts from teacher interviews:

> T1: They actually do have a need and they express that they do want to learn, they want to be able to do things so yes, working from the known, sometimes it doesn't actually work. They do need more challenges, so I do find that for them not to be just satisfied with things that they can do, and they often say this - you know, you expect us to do a lot more than we think we should.
>
> T2: So I read the articles, but as you noticed today I started, I always try to push them a little bit past their comfort zone, so now I'm starting to ask them to actually take bits of it and some of them can do that quite well and others panic a bit. Especially today, but yeah, so that's the idea.

And in the following excerpt, the teacher is being both supportive (and respectful) of the learner's opinion about cultural differences, but also challenging him about his observations about these differences as barriers to communication in the workplace.

[18] Although written originally about mentoring, Daloz' work has been applied widely to teaching adults generally.

[19] See also Venezky et al.'s case studies (1996) of literacy students.

L: Like for most of the Samoan people, finish work on weekend be quite happy go to the club or social to drink.
T: Yes?
L: Go out for drink.
T: Yes?
L: That's the most activity they have.
T: Mmm. That's a tricky one [name] 'cause you see some of the Samoans don't drink at all.
L: Oh, OK.
T: Yeah, I know what you're saying, but there are some that just drink heaps and they go to the pub and get like really drunk, yeah? But then, there are a lot of Samoans that don't drink at all 'cause they are such strong Christians.
L: [They] drink lots and make me feel like uncomfortable
T: Yeah …
L: Yeah, so you have to, to talk with them.
T: Mmm, when they're drinking or even when they come back to work?
L: No, like when they get drunk.
T: Right, so when they're drunk. Yeah, I think that's a barrier, yeah, I reckon, I think with this assessment, it's how you see things, you know, and if you found like you're working with the Samoan people here aren't you?
L: Mmm
T: And if you've found like, you've been out with them haven't you, or if you've had social drinks with them at work and then if you've found that their drinking is a barrier to you communicating well with them. 'cause you're not saying that they drink a lot and then you can't talk to them. What about your culture, would your culture drink a lot like that?
L: Not really, some people like to get drunk.
T: OK, well, I think that's fair enough, if that's something that you personally have found a barrier, so put it down.
L: Not really a barrier …
T: It's not a barrier?
L: No really.
T: I suppose it's not like all Samoans or …?
L: Yeah.
T: But, it's still your experience … so if that's something that you've personally experienced with the people you've worked with who are Samoans, I think that's fine to write it down.

Overall, we saw far more instances of teachers offering support for learners than challenge.

3.3.4 Affirmation and feedback

Convincing learners that they are capable of completing tasks is an important on-going part of literacy, numeracy and language teaching, which often involves a cajoling/affirmation (in this case, a gentle teasing of an under-confident student) process:

T: OK, when you came in last time, you did a bit of a writing sample here that I was gonna get you to read what you'd written.
L: Mm, alright, I'm gonna know how to read my one.

T: You don't!
L: No, I do!
T: Oh, you do know how, well that's good, that's good.

Another teacher explained what she had been doing to reassure a learner in a class where she had been working with learners individually:

> T: Yeah, that was the one doing NCEA Level 1 Science and she needed just a little bit of help with her wording. She had it all there, but she just needed … sometimes it's just actually sitting beside the person and reassuring them that what they've got is correct and that tends to happen in a subject I'm interested in and I know about. But I mean, if she was doing something like physics or something like that, then I'd probably won't be able to help her that much and I'd probably just rely on what's in her book can help her to go back. So it's really just a facilitation sort of thing. But because that's the topic I know a wee bit about, I know I can talk to her a bit more about it and you just get stuck on a word here or a phrase here, yeah helping her to get a flow with what she's doing 'cause she has got it all there, but she needs that confidence.

Some of the teachers were quite demonstrative in their affirmation of their learners (such as positive comments given when handing back completed work), while others were more restrained and also more subtle in how it was phrased and offered. In some cases, there was a barely audible "Ka pai, so we have no problem with that," "Really good thinking [name], you've come up with some really good points there," or just "excellent" that were an integral part of the dialogue between the teacher and learner.

As in Scogins & Knell's (2001) study, we did not hear any substantial negative feedback or evaluative statements, although there were instances of teachers correcting incorrect replies.

3.3.5 Questioning

Questioning is the 'bread and butter' of educational dialogue and underpins most interaction between learners and teachers, irrespective of the level or context involved. Apps (1991, p. 67) says that "being able to ask probing questions is one of the most powerful teaching tools" and was identified as a key attribute of effective teaching by the Adult Learning Inspectorate report (2003) reviewed earlier in this report.

Pratt (1998, p. 144) lists a range of functions for teachers' questions, including:

- assessing prior knowledge
- activating prior knowledge
- helping learners structure knowledge – i.e. make links within and between subjects
- probing for understanding
- providing opportunities for the having of 'wonderful ideas'.

Questions are usually asked by teachers, but learners' questions should also be integral to educational exchanges, both to their teachers and among themselves. Active, focused questioning by learners can play a valuable role in promoting greater

interaction in a classroom and can also provide some indication of active involvement by learners.[20] Consistent with overall interaction patterns, the questioning that we observed in the 15 classrooms was clearly dominated by teachers. We observed only two classrooms where the learners' questions were a prominent part of the educational interactions.

In our observations of teachers' questions, a number of patterns could be discerned.

Levels of questioning

The great majority of questions posed by the teachers involved simple recall of knowledge. As Pratt (1998, p. 144) points out, questions beginning with *what, who, where* or *when* are more likely to only test recall and generate descriptive answers, whereas questions beginning with *why, how* and *what if* are more likely to probe understanding and higher levels of thinking and analysis as argued by psychologists such as Bloom.[21]

In some cases, the questions were pitched either too high or too low; the former inevitably resulted in silence, the latter produced ready answers, but probably little challenge for the respondents. An example of the latter is one question from a worksheet:

> The way that people use space around them can provide us with a certain amount of information about them. The correct name for this is proxemics. Write a definition of proxemics.

This (inevitably) led the learners to re-write the first sentence as their answer.

Some teachers did use questions requiring a higher level of analysis. The following question asks the learner to transfer his evaluation to a different setting (his home country).

> If you were in a Chinese factory, the same sort of factory in China, do you think it would be the same way, where people might not talk to you, or do you think the people will be more friendly to you?

While in other cases, evaluative questions were quite brief.

> So what make you think that is important? [a follow-up question to a learner's response]
>
> How well do you think your team would cope with that? [a machine break-down], [followed by] Why?

The interchange below shows a series of questions where the teacher is trying to get the learner to evaluate the significance of his learning for the workplace.

> T: And do you think it has done that, do you think talking about culture like we have, has made you a little bit more…?

[20] As well as being an essential element of critical literacy.

[21] Bloom's taxonomy provides a useful means of categorising questions and their corresponding skills; these range from knowledge at the lowest level, through comprehension, application, analysis and synthesis to evaluation at the highest level (Bloom, 1956).

L: Yeah, maybe a little bit better now, be better forgiving.
T: Yes, so a little bit more forgiving and a little bit, perhaps more friendly?
L: Yeah. Also, and learn a lot of managing skills.
T: Oh yes?
L: Like asking them to repeat a question you ask.
T: Right, are you using that with [name], in the factory?
L: Yes, sometimes.
T: Excellent, that's so good to hear, so you're asking for feedback from them?
L: Got, if that exactly happen, if I tell them to do something, I'll be, yeah, yeah, yeah. So they won't do that, even don't know what you saying.
T: Yeah, yeah. So, have they actually been doing that?
L: Me ask again.
T: And, that's happened?
L: Yeah.
T: Oh, that's fantastic.
L: Yeah.
T: Oh, that's great to hear, that really is, I feel happy about that. 'cause that's the whole point, like you know, when you come into a classroom and you learn all these things, there's no point learning them and keeping them in your head and going away and acting the same way. So when I hear someone saying, you're actually using what you learnt, that is great. Good on you [name], that's good. It's working.

Some questions were clearly aimed at making the learner link or scaffold their previous experiences or knowledge in order to understand new meanings.

T1: Now we know what foreign people are [discussed in a previous session], so what do you think foreign objects are?

T2: So if 100 cm equals one metre, how would you write 120 cm as metres?

Open versus closed questions and specificity

Like recall questions, closed questions give learners little stimulus for analysis or reflection, often imply that there is only one correct answer and seem to convey an impression of the teacher asking 'What's the answer in my head?'. On the other hand, open questions signal to learners that a range of answers is possible and acceptable, that they are encouraged to think beyond the immediate and literal; furthermore, they are more conducive to critical thinking.

T: If that happened [foreign object falling into a machine], what would happen?

The great majority of the questions that we observed were closed ones. The fact that there were very few open questions is probably one of the reasons that we observed very few sustained discussions or debates. This exchange shows two teachers endeavouring to open up a discussion despite limited responses by the learners.

T1: So what else could he have done?
T2: So what does it mean to work as a team?
L1: Support each other?
T1: How do you support each other?
L2: Fun being in a team.
T1: So you think that fun is being part of a team?
[T 2 then gives examples of team work in the factory]
T1: Other examples?
L1: Church.
T1: In what ways is a church like a team?
[leading to a more detailed discussion among the group]

Questions to elicit opinions and feelings

Prompting learners to express opinions and feelings is often seen as an important means of encouraging critical literacy skills. Learners who can critique and debate issues first need to be encouraged to express their own personal opinions and feelings. As with two of the studies quoted earlier (Beder & Medina, 2001; Scogins & Knell, 2001), we saw very few instances of learners being asked their opinions about topics or being asked to express their feelings about those topics, which these researchers argue are important prompts to further discussion and debate – a quality that many teachers value highly in their teaching philosophies. There were a few exceptions, as can be seen in these exchanges.

T: Do they swear at the [manufacturing product] sometimes?
L: Yeah, sometimes.
T: Does that offend you, does that, what's the word, upset you or make you mad?
L: If they swear at the [product]?
T: Yeah.
L: Oh, in our culture, if I together with my sister or my, somebody swear, it's no good. That's our culture.

T: And so how do you feel when he doesn't say please, what do you want to say to him, and what do you feel?
L: I feel mad.
T: You feel angry…
L: Angry.
T: Yip, yip. Do you say anything to him?
L: No.
T: No. And that's kinda part of your culture too isn't it?
L: Mmm.

Leaving gaps for learners to respond to questions

Probably one of the most frequent questioning patterns involved teachers asking a question, then leaving only a minimal 'space' for learners to respond, before either supplying the answer, or less frequently, asking a follow-up question (usually at a lower level than the first question). In many cases, there was a feeling of the teachers 'rescuing' the learners by supplying the answer when there was no response, so that

the learners did not feel embarrassed. Below is a fairly typical example of this pattern:

T: OK, some history, there we go. OK, down here, some history, Hell-hole of the Pacific, sounds like a fun place to be doesn't it?
L: Yeah.
T: OK. So what does this particular sentence tell us?
L: That Europeans, that Europeans…
T: Yeah, OK, what this is telling me, is, the town began as a native village of Kororareka and acquired its first Europeans, the first Europeans to visit that particular settlement were ships' deserters and time expired convicts. What do you think the word, time expired would mean?
L: [brief gap, no response]
T: They served their time. They, what they used to do back in the 1800's, 'cause if you …
L: Um …[looks to make comment, but then withdraws]
T: Yeah, and if got caught even just stealing a little loaf of bread, they would usually send you to Australia, this is the English people, they would send you to Australia, that's why Australians are still called convicts. You're not Australian are you?

In other cases, the ready supply of an answer by the teacher appeared to occur to keep the 'flow' of the teaching moving; stopping to ask follow-up questions would delay covering the material planned for the session.

Often, teachers would endeavour to engage with the learner by asking follow-up questions, but would then resort to giving the answer when unsuccessful.

L: [reading] 'In describing possible barriers, you must group verbal and non verbal aspects of communication which relate to different values and of needs and of practice'.
T: Does that make any sense at all when you read that or is it just like a whole lot of big words?
L: [no response[
T: What about when it says, verbal and non-verbal aspects? Do you know what verbal is? Is that a new word to you?
L: Yeah.
T: Kind of?
L: Yeah.
T: Do you know verbal? Verbal is just, words. Yeah. So, verbal, like you could communicate with someone or, you know what communicate means? 'cause some of these words, I know I use these words all the time with people, and then I think all of a sudden, 'they might not know that word. It might not be a word they've heard before.' Communicate, have you heard of that one before?
L: [silence]

Using questions to involve all learners in a group or class

How teachers ask questions is one key strategy for ensuring that all learners receive an equitable opportunity to participate, even if they are somewhat reluctant by nature (or habit or culture). Although we did not record the detailed number and distribution

of questions in our observations, it was very clear that some teachers consciously ensured that their questions were directed around the learner group – often by naming individual learners who had not responded to questions directed to the whole group – "someone different report back this time."

In other classes, teachers focused their questions disproportionately on a small number of learners. For example, in one class of ten learners lasting over an hour and a half, only three of the learners responded to the teachers' questions and she made no effort to direct any of her questions directly to the other seven learners. The learners not responding to the questions were noticeably less engaged than those answering the questions.

Responding to learners' answers

Incorrect or incomplete learner responses to questions represent a potential 'teaching moment' for further discussion, analysis or teaching of content or skills. While probably the most frequent response for teachers was to respond to incorrect or incomplete answers by simply providing the correct answer, others would then re-phrase their questions or ask totally new questions.

Only a few of the teachers employed a third option: using the response as a springboard for further learning by trying to understand why the learner had responded incorrectly and then teaching to that error. In some cases, the follow-up response was reasonably simple:

> T1: So, why do you think that? [leading the learner to diagnose his response]
>
> T2: Does that look right to you? … Why not? What do you think you should have done?
>
> T3: So, what did you do here? [learner re-examines work] And how did we say you do it? [re-calculates division task] That's right. Great!!
>
> T4: How about you read it again and see if it sounds right to you.
>
> T5: Do you think that's the only way to do that? (showing that a range of answers were possible).

Rather than supply an answer herself, one teacher used another learner's response:

> When I asked [name] that question this morning, he had a really good answer to it. He said …

Some of the teachers picked up miscues selectively. For example, in one session the teacher was using a car magazine as the text, it was clearly too difficult for the learner, so the teacher chose only a few of the miscues (usually the less complex words) to teach to.

Summative questions

At the completion of each session, one of the workplace teachers asked her learners, "So what have you learned today?" If learners gave vague responses to this question, she would then press them further to identify specific skills or content that

they considered to be new. Asking this question not only appeared to be a useful way of indicating closure for the session, but also prompted reflection or self-assessment and in some cases, led to discussion about planning future sessions.

T: So did you learn anything from today at all? What did you learn today?
L: Learn about barrier.
T: Mmm, barrier …
L: And, communication.
T: Yeah, cool. So they're two new words aren't they? Yeah. Anything else new to you or make you think of things in a different way?
L: Yeah. The culture of the Palagi and my culture.
T: They're different aren't they?
L: Different, very different.
T: Yeah, so that's what we looked at, we looked at barriers and communication between cultures basically. We're gonna carry on with this assessment 'cause that was the first part of the assessment and then next week, we'll look at Chinese or we might even be able to get [name] in 'cause I don't know a lot about the Chinese culture and we could find out some things that he finds hard about, say the Palagi and also the Tongan culture. And so, we're just gonna carry on through the assessment and it's mainly all about how to overcome those barriers, so hopefully that we can gain a little bit of understanding about the other culture and not, not get upset.

Another teacher summed up one session by simply asking her student what he had found hard and what had been satisfying.

3.3.6 Critical thinking

Critical thinking is a skill often touted as an essential element of literacy, numeracy and language teaching, not only by proponents of cultural literacy in the Freirean tradition, but also by many mainstream educational philosophies. Brookfield (1987) for example, advocates teachers helping learners to become critical thinkers, which helps them to become contextually aware, to develop reflective scepticism, to be able to unearth and analyse the assumptions informing their values, beliefs and actions and to explore alternative ways of thinking and acting. He argues that critical thinking skills challenge our habitual ways of thinking and acting; learners are then able to start considering alternative ways of thinking and acting.

Unlike most of the other dimensions of teaching that we observed, critical thinking is a less tangible dimension to identify and probably requires not only longer periods of observation, but also a more focused study concentrating on this dimension. We therefore report that while we saw little evidence of teachers promoting critical thinking, this assertion needs to be treated with some caution.

We did see a few instances where learners demonstrated critical reading of texts. For example, in two of the workplace sessions, learners identified important omissions in the worksheets they were reading about manufacturing processes. These omissions were noted for feeding back to management. A number of the teachers covering work-related topics also stressed the importance of occupational safety issues and encouraged their learners to be pro-active in notifying these sorts of issues to management, using appropriate equipment and following correct procedures. One

workplace teacher for example queried the learner's use of appropriate equipment to reduce her back pain.

However there were very few instances of teachers and learners engaging in discussion or content that involved a critical stance in relation to broader political and social issues. Probably one of the few examples of this type of interaction came from a workplace teacher who was covering a unit standard about cultural differences.

L: Palagi they look down on us Island people.
T: Oh, so you think the Palagi people look down at you?
L: Yeah, I do.
T: Oh, so what makes you think that?
L: Make me, make me shame …
T: Make you shame. Oh, that's sad, I feel sad - you always say something that makes me upset [both laugh]. Yeah, that's very true, that is a big barrier, yeah I think that's a awesome point, no-one's bought that up. That's called, racism, being racist, or stereotyping - maybe 'cause you are from the Islands, so that you're not as good as the white people, it's true isn't it?'
L: Yeah.
T: Ah, so you said to me that you think that some Palagi people look down on you, yeah? What do they do, that shows that they're looking down at you. Do they say something or do they look a certain way, or do you hear them saying something? How do you know that?
L: They don't care.
T: How do you know?
L: 'cause we, everything we ask for them for, they don't give for us.
T: Oh. What sorts of things would you ask for that they don't give you?
L: Like we work in the chiller. Yeah, but, when the Palagi people come and work with us, they won't push them like they push us… They put the Palagi on the easy job.

This teacher and learner also had a discussion about the site union as they were completing the session.

T: So he's coming to see you guys?
L: Yeah. But some of our, some of us they poor, the union …
T: Yeah?
L: That's what I hear.
T: Yes, do you think that's a good idea?
L: I don't know.
T: How much is it each week to pay for the union?
L: $4.90.
T: Mm.
L: Just for the new union.
T: Is it gone up?
L: Yeah.
T: What'd it use to be? How much did it used to be?
L: Oh, $4.50.
T: Oh yes, it's gone up 50 cents a week. And what do you get for that money? Anything, like what, they help you get pay rises?
L: I don't know.
T: The union …
L: I don't know.

T: Why don't you ask, that's your right.

The closed nature of most of the teachers' questions we observed could be seen to be related to the limited number of critical thinking examples. Open, and especially evaluative questions, are fundamental to the promotion of this skill.

3.3.7 Teaching of metacognitive skills

Metacognition refers to the ability of learners to be aware of, and monitor, their own learning processes; it is sometimes referred to as 'thinking about thinking' or 'learning how to learn'. Paris and Parecki (1993) report from studies of children's reading research that "studies of good and poor readers have found that metacognition is a key characteristic that distinguishes successful from less successful students" and this finding has confirmation in some literacy, numeracy and language research (Besser et al., 2004). Learners who are taught to analyse their own learning, who are given a range of learning strategies and who are encouraged to reflect on not only what they have learnt, but also how they have learnt, are more likely to transfer these skills to new situations and difficulties. In reading for example, learners who are encouraged to reflect on whether a text makes sense when reading it are much more likely to independently identify errors and seek alternatives.

Identifying the teaching of metacognitive skills is not always straightforward, but we have seen some evidence of it in this study. We saw three types of strategies that could be broadly termed metacognition (involving three different teachers) – the first type involved the provision of a learning resource to facilitate learning, the second involved coping and strategising in relation to physical disabilities and the third involved reflections/discussions between learners and teachers about their learning.

One of the tertiary institutions provided their learners with a substantial student booklet, which included extensive advice on how to access the library, the language support centre, the learning centre and other student service centres. In addition, the booklet contained comprehensive and well-presented information about learning styles, time management, listening strategies, memory strategies, reading for understanding, note-taking, summarising, a range of follow-up web-sites and some suggestions for independently developing literacy skills.

The second example involved a learner (enrolled in a course, but receiving extra help 1:1) who has moderate hearing difficulties. In talking about progress in her class, the teacher checked out with her how she was strategising around this difficulty.

T: That issue of other noises going on around you like the cell phones, that's a distraction to you is it?

L: Well, the class was all quiet except for our young ones and it had been boiling hot, we had just met with the rest of the class and our other teacher, I feel sorry for her 'cause she was talking to us and she's trying to tell the other young students to quieten down. And the cell phones are going off and she is talking over them, so it wasn't really so much, what was going on. It was the frustration on her face and then we were all turning around looking at them and they just carried on.

T: Do you sit near the front?

L: Yes, I do.

T: So you do ...

L: That was the first time I sat near the younger ones, I don't usually hear their cell phones or I don't take any notice of them. When I'm in class, I'm usually focused on what I'm supposed to do.

T: Good.

L: Rather than watching them, but that day I happened to be sitting close to them, so I was sitting there and they were on this side and even though my head was down, you could see them.

T: Yes, so you know what to do?

L: Yes.

T: You go to the other side?

L: Yes, usually, normally.

Along similar lines, another case involved a learner's sight problems. This teacher and learner initially started making jokes about the latter's need for glasses, which gradually became more serious with the teacher challenging him to have his eyes tested ("Got to get some glasses eh, gotta borrow your ones") as it was clear that he was squinting in order to read.

This pair also engaged in a number of discussions about how he learnt to do various tasks.

L: I know that I can do that now and when it's too hard I can always use a calculator eh?

And later,

L: [unprompted, following the correction of some maths errors] 'cause that's what I wasn't doing, I wasn't putting the zero down, eh?
T: That's right, that's right ... Great, now that's good.
L: I haven't forgotten.
T: You haven't forgotten and that's good.

It is not clear the extent to which the learner was generally a reflective person or if it was a skill that he had been taught, but the teacher certainly encouraged him to make these reflections. For example, the learner's difficulties with reading a 24 hour clock culminated in the reader reflecting on why he found it so difficult and how he had learnt to read them successfully – "when the hour is bigger than 12, you need to subtract 12 off it and that time's after noon."[22]

This learner also reflected on his work on long division:

T: That's fine. You must feel happy with yourself then?
L: Sure am mate, 'cause I didn't think I could, about two weeks [ago] I didn't think I could, say, say, you can say that that process is in there now eh?
T: You've got it in your head, I'm sure you've remembered it.
L: So it's just a matter of concentration if I make a mistake.

[22] This learner was a good example of how adult LNL learners have 'spiky' learning profiles; he had an extensive oral vocabulary (talking about a gaggle of geese as an example of a collective noun), but struggled with some other basic skills.

T: Concentration, that's what it's all about.

After reading a difficult piece of prose, another 1:1 pair reflected on how the learner could analyse words to improve his phonemic awareness.

T: If you just slow down a little bit when you're reading don't be in such a hurry, no rush, OK, so, what have we got next? What I would suggest is, when we come across words that you're not sure of, which ones were they?
L: Seen some hard words in here and there were some easy words that I couldn't get.
T: Yeah.
L: 'Cause I don't know how to do the vowels or the o's and that, or ers, e, r …
T: Blends, joining, yeah. Well, I think that you're doing very well, you worked out a couple of words then, that's very good. So it's just teaching you the skills to look at the words and how to break the word up. And the good thing about you, being an adult, is you've got probably a lot of this language you've used, but the written word isn't so familiar with you, yeah. So the more we get the reading going, the writing …
L: The more …
T: The more you'll learn yeah, but just one little step at a time OK? And I'm just getting more interesting stuff like this.

And this was an example of a teacher getting a learner to reflect on her answers when doing subtractions.

T: Now remember what I said, when we are doing subtraction, the answer is always going to be less than that number. Why, is it always less?
L: 'Cause you're taking away.
T: Right, it's getting less all the time, so if you start from 16 …
L: And you take away 7.
T: Tell yourself, [name], I cannot have an answer that is 79, because 79 is way more than 16. You've got to get it, that it must be less. For 16 take away 7, it's gonna be less than 16.
L: So I, I shouldn't have had that 7 there, right...

3.3.8 Gradation and sequencing of content

Determining the order of content (either knowledge or skills) to be taught is often done intuitively by teachers (such as teaching historical events in a chronological sequence), but can help a learner progress more readily if done skilfully. As Cranton (1989, p. 54) says, "[appropriate] organisation of the content will always make both teaching and learning easier."

Because of the short-term duration of our observations, there was limited opportunity to see evidence of long-term grading (i.e. in terms of difficulty scaffolding from simple to more complex) or sequencing of content (e.g. teaching content in a logical order). The best examples were seen in numeracy[23] where teachers typically set exercises

[23] It is possibly easier to do this with numeracy than in reading for example, where texts are usually not homogeneous in terms of reading levels and are not able to be manipulated as readily.

first at a level where learners were performing previously (or slightly lower to facilitate review) and then steadily increased the difficulty of the exercises. In a session teaching measurement, one workplace teacher firstly gave a short explanation about the history of measurement and then asked the learner to identify anything in the room “about a metre long.” She then asked him to identify things one millimetre long, the results of which were then recorded on a whiteboard. This exercise led to a discussion about how decimal points can be used in recording measurements using the examples identified by the learner and finally, how measurements are recorded in company documents. This sequence exemplified teaching principles of moving from the concrete to the abstract and from simple to the complex; the teacher structured the exercise and guided it through her questions and the learner clearly ‘did the work’.

3.3.9 Generic teaching methods used

As explained in our methodology section, we classified the teachers’ activities into three separate categories – facilitative processes, generic teaching methods and LNL-specific teaching methods. The summary of the first two categories are given in the following tables.

Table 2 - Types of facilitative processes used by teachers (N = 15)

Greeting	15
Overview of session	13
Personal chat/discussions	13
Revision of previous session	11
Planning of future work	10
End-of-session review	9
Administration	5
Goal-setting	3
Karakia	2
Conflict resolution	1
Monitoring	1

The table below shows the dominance of the whiteboard, worksheets and teacher led activities.

Table 3 - Types of teaching methods used by teachers (N = 15)

Writing on board/pad	15
Posing questions and answers	15
Feedback/praise	14
Worksheet	13
Pre-teaching and explaining task	13
Modelling	11
Brainstorm	11
Scribing (recording on behalf of learner)	6
Roving and marking	6
Mnemonics	4
Note-taking	4
Journal and ILP writing	4
Demonstration	4
Computer	3
Role play	3
Mind mapping	3
Summarising	2
Lecture/teacher talk (sustained)	2
Facilitating (prolonged) discussion	2
Demonstrating/explaining	1
Game/puzzle	1
Student presentation	1

3.4 Forms of provision

In the course of our observations we saw a range of different forms of provision, which are discussed in this next section.

3.4.1 Integrated LNL provision

Seven of the 15 teachers observed were teaching literacy, numeracy and language skills integrated with other curriculum areas. Consistent with the nature of integrated teaching, the amount of explicit literacy, numeracy and language teaching in these sessions was on average much less than in LNL-focused provision, but also varied considerably within this group. In some integrated sessions, the entire teaching focus was on a specific topic, with no discernible, explicit teaching of literacy, numeracy and language skills. It is not clear whether integrated LNL is essentially spasmodic (i.e. occurring irregularly due to the nature of the content being covered) and that a longer period of observation is needed to see these occurrences, or whether there is simply not much explicit literacy, numeracy and language teaching occurring in these programmes.

Many of the teachers of integrated provision find it challenging to cover their normal curriculum as well as respond to LNL needs of their learners.

> No, the days have certainly become fuller since we have integrated the literacy into it. We have had to work around that, so perhaps it takes

> longer for them to get to where they want to go with their national certificates and unit standards, but I think overall it gives them help in other aspects of their life that makes it beneficial.

This teacher valued the availability of colleagues (and especially a literacy, numeracy and language specialist) in her organisation to help her with the more difficult issues.

> The good thing is, if I get stumped on it, there are always others here that are able to help, but the basics I have no problem with.

Teaching literacy, numeracy and language skills in an integrated programme is clearly different from teaching in programmes that are solely focused on literacy, numeracy and language skills because of the demands of covering the non-LNL content.

3.4.2 1:1 versus small group and class tuition

One major variation among the 15 teachers was whether they taught 1:1 or in small groups/classes. The 1:1 teaching was distinctive for its teaching intensity where, although learners may only be receiving one or two hours of tuition per week, they are taught in a very individually focused and personalised way. There is no need to compromise the content or level of the teaching in any way in this format. Three of these teachers also made considerable use of 'homework' or tasks set in the previous session to practise and consolidate recent learning – such as spelling lists to learn and manuals to read.

Teaching classes of learners is fundamentally different because of the need for the teacher to cater for a diversity of learners in terms of their learning and personal needs.

> Because everybody as I say, is at a different level, and you have to sort of bung them in three or four different groups normally and that can be a problem. As you saw in there this morning, a lot of people finished ahead of time - they are obviously the ones that need the least help and the ones that hang back are the ones that I would spend more time with and give them perhaps a little bit more time than the others you know? As long as they have the basics and they have enough to be able to sit down there and do the work that they need to do at this level. I don't know, I just sort of think that those are the ones that will make it. And the ones that really need the help, they are the ones sitting there at the end and those are the ones I tend to spend a little bit more time with when I have time to fit into the rest of the curriculum.

Where there was a reasonable degree of homogeneity among the learners, the teacher was able to teach to the whole group reasonably well, but in classes with a broader range of needs, teachers had to resort to a number of strategies to fully engage the learners. In most cases, this involved some form of 'plate-spinning'. Typically, the teacher would set the class some form of exercise (usually the same for all class members), while she roved the room, working with individual learners on specific issues as they arose. In one class, no whole-class teaching was observed at all; the class was effectively one teacher working with ten individual learners, although some learners worked in pairs from time to time.

In her interview, this teacher explained what she was trying to do.

> I was trying to be available to the students, as they needed me to move around to see who is needing help or some people need kind a bit of help to get started on things, or need help to stay on task, that kind of thing. Yeah, so it's sort of moving around, mingling and just finding where people are at. It's a very unobtrusive sort of presence, just trying to be of assistance wherever it's needed and it involves sort of sitting with people, sort of getting right alongside of them.

In a few cases, this strategy resembled a 'brushfire-fighting' exercise, with the teacher obviously going to the learners most visibly disengaged. Teachers also said that they felt this strategy only worked when the numbers were reasonably small.

> Yeah, it's just keeping an eye on where everyone's up to, you know, where everyone's at, where you need to go to keep someone on track or to encourage or … lucky it's a smallish group so you can actually do that, individually. You can't do it in a big classroom, that's for sure.

3.4.3 Duration and intensity of tuition

In this project, we have come to see that there are three dimensions to duration and intensity:

1. *teaching intensity*, which refers to the amount of focused teaching learners receive related to their specific learning needs
2. *programme intensity* refers to the amount of instruction over a certain timeframe (e.g. one hour once a week versus 20 hours)
3. *programme duration*, which refers to the length of time a programme is available for learners (e.g. a 30 week course versus programmes where learners and teachers negotiate the duration).

Thus it is possible to have various combinations of these factors:

- Student A receives 1:1 with high teaching intensity once a week (low programme intensity) and long programme duration (open-ended until withdrawal)
- Student B in a class of 15 learners may receive low teaching intensity, high programme intensity (the course is full-time) and medium programme duration (the course lasts 10 weeks).

Our observations covered instruction that varied considerably across these factors. While our literature review clearly indicated that duration of tuition is certainly important (the longer learners stay in programmes, the more likely they are to improve their literacy, numeracy and language skills - ideally for at least 100 hours duration), and that intensity of tuition is also significant, there were no definitive indications of their relative importance or their interrelationships – for example, is intensive tuition over a short period more effective than less intensive tuition over a longer period?

In the course of this study, we saw a range of situations that exemplified these dimensions. For example, we saw some learners who received very intense, challenging teaching 1:1, but who only attended for an hour a week. In contrast, we saw other learners who were attending full-time programmes of 30-40 weeks

duration (high programme intensity and long duration) who did not appear, in the sessions we observed, to be either challenged (judging by their body language and low response rate to teacher questions for example) or receive very little teaching specifically focused on their learning needs. Much longer periods of observation, and/or studies that track learners over time, would be needed to understand more about how and when learners on these programmes were engaged.

The parameters of our research meant that we are not able to make any evaluative statements about intensity and/or duration. In order to do so, we would have needed to include a number of other components such as pre- and post-learning assessments and a much larger number of learners. These provisos notwithstanding, we would point out (based on the literature review) that high intensity and/or long duration are almost always preferable to low intensity and/or short duration in order to achieve significant impact on learners' literacy, numeracy and language skills.[24]

Two other specific comments in relation to duration and intensity: firstly, several teachers commented that students with high levels of need (social and pedagogical) are likely to need longer duration of teaching.

Secondly, intensity of tuition can be achieved in a number of ways, not just by 1:1 teaching. In some cases, team teaching helped increase the teaching intensity, while another teacher talked about how she used input from a video for this purpose in a class.

> So the video's good because I can keep up the intensity. In the first part [of the video] you've got the active reading, the comprehension and you've got the writing and we also have learning plans in the books. And then you've got an hour like that, which is quite full-on and then by having the video, you again have got that intensity, with a different medium, that's just something a bit different and because, I could never teach like that in such a structured way.

3.4.4 Authenticity

One of the findings of our large-scale literature review was that learner gain is enhanced when programmes used a curriculum linked to the experience, contexts and interests of learners – what is termed, 'authentic curriculum'.[25] The continuum used in research from the US regarding the authenticity of curricula had at one end pre-determined sets of skills presented in commercially-available textbooks, and at the other, the activities and skills learners tackled were based on actual literacy practices drawn from their everyday lives.

In the light of this finding, we were interested in this study in observing how much, and in what ways, the teachers might base their teaching content on the learners' interests and experiences compared with other sources.

[24] Exceptions might include highly motivated students (usually not beginners) who have specific goals and work intensively for short periods with a highly skilled tutor.

[25] See Section 3.3.1, (Benseman et al., 2005). The international research on authenticity looked at the general focus of programmes and not whether every resource in every session was based on learners' lives.

We did not observe any skill-focused teaching that used a majority of material from commercial publishers and where there was no use of real-life contexts and literacy practices, in the way this was described in the US studies. Typically, the sessions we observed focused on real-life literacy activities, events and issues, augmented by worksheets tutors had devised or photocopied from workbooks. Neither did we see any material that was not adult appropriate, which has sometimes been a feature of some literacy, numeracy and language provision in the past.

3.4.5 Authenticity and curricula

We saw many examples of teachers endeavouring to select teaching content that was both authentic and of interest to their learners – in other words, the teachers usually interpreted their learners' interests on their behalf without directly consulting them.[26] In most cases, the key criteria for picking content appeared to be topicality (such as local body elections) and being adult-appropriate.

Below is one teacher's explanation of how she chooses her reading material for her students.

> T: Everyday we do some reading, and that sometimes it is taken using all the [National] Geographics, where they have to actually go and select something that appeals to them. I use things like that because they're good quality, and even if the reading isn't, even if they have reading difficulties, there are such excellent photographs that there is a lot that they can actually get from the photograph and the caption. Comic strips, comic type stuff, no they're not that interested in. …Yeah, we did quite a bit of historical stuff, the Olympic Games. So using newspapers, using some topical things, we've been doing a series of things about legends from different parts of the world and some of the myths and things like the [Chinese] terracotta army, you know, and how there is actually quite a lot of information in some of the young adults' publications in the library. There's quite a bit there of good well-produced stuff that's just in simple language. So that it is still factual, but it is written in a way that can be understood.
> I: And who chooses those?
> T: Me usually.

We saw only one case of where the teaching content was clearly based on a topic that had been suggested by the learners in advance.

We did observe on three occasions the spontaneous emergence of issues or topics of interest to the learners during teaching that were different from those planned by the teachers. In each case the energy level of the group rose perceptibly and there was much more participation for a few moments than there had been previously. However, the teachers cut them short, appearing to see them as a deviations or distractions from the lesson, rather than as an opportunity for engaging with the learners' specific interests. For example, in a discussion about identifying hazards in the workplace, the class was discussing possible sources and consequences of electrocution. When one learner started to relate a story of how he had received a shock from an electric fence and how he had tried to turn it off, the teacher clearly saw this as a diversion and said, "Come on, let's get back to what we are supposed to be doing."

[26] We did not see how curricula might have been negotiated with learners at the start of programmes.

Workplace programmes were probably the best examples of where the teaching content was highly contextualised to a setting, albeit not necessarily of the highest personal importance to the learners involved. All three of the workplace teachers not only worked with content and topics arising from issues out of the company's production, but also constantly asked learners to relate their answers to their work and gave examples derived from it.

> So, if that happened in your job what would you do?

In one case, the teacher took the learners down to the production line after the session to ensure that they understood the processes that had been discussed (involving the reading of a detailed worksheet about manufacturing processes) and to clarify any issues they had about them.

While these teachers endeavoured to consult with their learners about their input to the content being taught ("I want input from you about next week's session"), the authenticity of content in these cases was ultimately driven by the needs of the workplaces, rather than the learners' personal interests. One workplace teacher commented that while she knew that her teaching was always related to the learners' work roles, she also knew that she was not able to teach to learners' personal needs unless they were also related to the workplace's needs.

3.4.6 Authenticity and level of content

One teacher had endeavoured to use her student's strong interest in cars as a basis for the teaching content of her session. She had purchased a car magazine and used it as the reading material for the session. Unfortunately the vocabulary level of the text was clearly beyond what the student could cope with, so that while the content was intrinsically interesting to him, he was unable to cope with the complexity of the text, which led to a high number of errors when reading aloud and the teacher having to provide much more of the text than she did in the rest of this session.

L: [Reading about boy racers in downtown Auckland) Right, Downtown Auckland city late on Saturday night …
T: Commerce …
L: Commerce Street … Commerce Street is overrun with more than 35 modified performance cars as happens on such……
T: Have a look at the beginning of it, so, the beginning, what sort of …
L: Is happening?
T: What sounds have you got there at the beginning?
L: [recording unclear]
T: Cool, what about the ending sound? i, o, n
L: on?
T: s, i, o, n, so it's occasion
L: Oh, occasion, oh yeah, occasion is not long before mayhem
T: Good.
L: Mayhem erupts …

Talking about this difficulty after the session, the teacher said that she had been more successful using the lyrics from the rap artist Scribe (the lyrics were displayed on the wall) where there was both current interest and more appropriate levels of vocabulary/text.

A second teacher used stories from the local newspaper, endeavouring to balance the current interest of the stories with a reading level that was manageable, but still pushed their skill boundaries.

> I go through the [newspaper] each week and I try to look for something that's topical. So the reading level of that is sort of below the [other newspaper], so it's a very functional reading level, but I read the articles and you noticed today I always try to push them a little bit past their comfort zone. I want to use material that's at adult level and of interest, but I don't want to use simple material. So the idea is that the cognitive level is adult level and experienced, but the skill level is below it.

3.5 Teaching of literacy, numeracy and language

The final findings section examines those elements that we consider to be specific to literacy, numeracy and language teaching, which represent the core skills of literacy, numeracy and language teachers.

3.5.1 Initial and subsequent assessments of learners' LNL skills

All of the teachers interviewed had used some form of initial or diagnostic assessment of their learners' literacy, numeracy and language skills, but their methods and processes varied considerably. In most cases, the teachers (or their organisations) had developed their own individual methods for carrying out the assessments.

This teacher outlines a fairly typical process for students entering an literacy, numeracy and language programme and also how on-going assessment of unit standards and course evaluations are built into the programme throughout.

> T: Initially, when people come in to enrol there is an initial assessment which just highlights really why people want to come. It's usually school has not worked for them or sometimes people have left school and realise that they do need a qualification as in units to get either on to further training or into a job. So that basically is what, is what this one is for. Any younger than 16, then with a school exemption. I then identify learning needs and also what they feel they want or need help in. So this is addressed at different stages throughout the course. Our courses are 24 weeks long, so we have two [courses] a year and people can join at any stage during the year. So, after an initial assessment, then our running of programmes, we have a look at an overall individual programme for some - there are some things, which we just can't run in the whole group. Evaluations of the programme are done every month and the trainees do an evaluation of the program, so that is that is handed in and yes, the good the bad and everything else that that, I actually find that quite interesting. And unit standards are offered, but it is not structured so tightly that unit standards are done between say, weeks four and five … In this situation unit standards actually put things into a real perspective and the range of unit standards that are offered on this course are listed and each of each of the learners has a list and can just tick them off when they've done them.
>
> I: So do you do formal written assessments after that?

T: Yes, for some.
I: Or go through their exercise books?
T: At some part of it, part of it has to be done, to collect the evidence every so often, often there is a part of it is written. Some of the kids just role play some, but some of it can be done orally. So nobody is really disadvantaged, in that if they can't do it, although obviously that has to be noted, and whether or not the questions had been read again by me. Yes and for re-assessment, how that is done, how it is gone about. And for each week everybody has their own weekly plan, each learner has got their own one and I'm their watch-out for what units they're doing, what they need to revise and so on.

Another teacher said that her assessment process started with an informal chat about her learners' background and their support system, followed by a more formal assessment that takes up to an hour. This assessment includes the use of the Marie Neale Reading Comprehension Test, Schonell Spelling testing, the Ashton Vocabulary test, SPELD's Auditory Memory Review and a numeracy test (a school-based test modified for adults).

For five other teachers, the initial assessments were done by a designated person in the organisation, but these teachers also do their own assessment within the first couple of sessions and barely used the organisation's assessments at all.

T: Well, when they come to us, we know nothing. They just come to us as a person referred from their case manager usually. And so we know nothing and we don't have any kind of entitlement to any kind of information like that. Sometimes it comes with them, sometimes not. [name] tends to assess people in a more formal sense - she's only just started working for us, so she's bringing in her assessments to cover where people are at, regarding literacy and we tend to use [name of PD person's] approach with assessing maths. So she tends to do the more formal assessment where she'll get people to sit down and she'll have an interview with them and talk to them. And then maybe they'll write stuff and that kind of thing, but I find the best way to assess people is to get them to do a piece of writing for me and they can choose a topic or I'll give them a topic or something like that. And I can find where they need to work on and then once they get into that process then it's really easy to say, 'right we'll work on grammar' and then we can go to the workbooks which have got all the grammar exercises in them. But I tend to want to start from where they're at, and the piece of writing that's coming from them, so that effectively the curriculum is what's relevant for them, that's what I tend to do.

None used a standardised test, but a number of the teachers followed the Literacy Aotearoa initial assessment interview form. Two others were different again.

One 1:1 teacher used a diagnostic test entitled LAWRA.[27] This test resembles the Burt test that is widely used for testing children's reading, but in addition to indicating a skill level, the LAWRA also provides diagnostic information about specific reading problems needing remediation. The teacher was very enthusiastic about the test as a means for attuning her teaching to the individual learners' needs.

[27] Included in Corbett (1995).

Another teacher used an initial diagnostic process that incorporated the Adult Literacy Achievement Framework (ALAF).

> T: They have a diagnostic interview and we just collect background information really, like what's their school backgrounds, how did they feel about school, what was their learning like and their language background, is English a first language or a second language. And also, they self-assess too, what do they feel their needs are in reading and writing and numeracy and organisation skills, so it's a self-assessment. Then we show them some pictures and they choose a picture and write about it for ten minutes and we have a set of readings at different ALAF levels, so they have a series of pictures and they write about. And then for the reading, we have a series of readings at a different ALAF levels and people choose which one they're comfortable with reading, and then we match those to the draft ALAF. We use it all the time, we find it really helpful.
>
> And at the end of each block of nine weeks, I listen to everyone read individually again, against two sets, and they read again at the level they were at, and we look at whether they can move up to the next level, and they try the next one. So, all the time their progress is matched against the ALAF. That way we can really see if they're really making progress. From the profiling we can see what their gaps are and then what's next, and then I write where they are in the profile, what their strengths are and so where your next step is, past tense, full-stops, whatever it is, that's what I want them to work on.

In the workplace programmes, company-wide needs assessments had been done and learner assessments done in relation to the broader assessment exercise.

3.5.2 Use of Individual Learning Plans (ILPs)

Individual Learning Plans have been promoted and increasingly used in literacy, numeracy and language programmes in New Zealand. Typically, an Individual Learning Plan will include biographical details about the learner, their personal details, results of initial and subsequent assessments and some record of their goals in attending the programme, including unit standards. They are intended primarily as an on-going record of a learner's needs and subsequent achievements. While there is no research available on their use or value per se, there has been some debate in the international literature[28]in recent months about their value.

About half of the teachers in this study used some form of Individual Learning Plan. Some of the teachers who use ILPs follow them very closely. One 1:1 teacher said that she used them not only to plan her teaching, but has found that they were also an invaluable way of demonstrating progress to her learners.

> We obviously do the initial assessment - the one I gave them this morning when they first came in - and we look at that and we see what's needed if they have anything that's specific, that's maybe different to what the rest of the group could benefit from. And if it's something that is only particular

[28] See for example, the October 2004 issue of *reflect*, the NRDC's magazine.

> to them, then I will do the one-on-one with them to try and get them up to speed. If it's something that a lot of people have a problem with, then I can introduce it into what we do in our weekly and daily classes, so we put that in. And we interview them once every three weeks and chart their progress and compare it to where they were at last time we interviewed them and what's been achieved since. That includes things like they will ask specific things, metrics or percentages they may have just come across percentages, so we would do some work on percentages and often it covers not just that student, we can introduce different things to everybody. We ask if there is anything they would like introduced into their programme or other programmes that they would like to learn because there is a lot of people advertising with those skills or whether it's just that they want to brush up on their skills.

In one session, the teacher and her student agreed that he had now mastered long division and he said (with great satisfaction) "you can say that process is in there now eh?" adding that "I won't be needing to do that again 'cause that's about as far we were going to go eh?" [referring to his ILP]

One teacher emphasised the importance of convincing her students that the ILP was their document, rather than the teacher's.

> My aim there is to push the students to think about their own learning and to think about owning their own learning. So I always try to get them to think that they're not doing it for me, that learning is for them and they have to be thinking about what happens outside that room, you know so that when they go home, what are they doing in their own lives to carry on with it.

Several teachers said that their students had ILPs, but that they did not have access to them or use them directly for teaching purposes.

> I don't use them much, I know we have them, I've seen them, but I think they're just more for when ... do you know [name] over at the office? She sort of, comes over, and she comes over and does the interviews, I think she uses them then.

We observed one class teacher incorporating ILPs into her teaching sessions by asking the students to review their goals for the past week and then writing out a new set for the coming week. While they were doing this exercise, the teacher roved the room, checking with individuals and helping them to refine their goals. Learner feedback from this venue indicated that the learners did not believe this process was useful.

Another teacher who used ILPs said that she felt that she needed to be more specific in both her analysis of learning needs and the goals she set with her learner. She felt that this change would help give better focus to her planning and teaching.

3.5.3 Seizing the 'teaching moment'

There were a number of instances where the interaction in the class generated 'teaching moments' where the teacher could utilise the opportunity to focus the teaching on a specific learning need or interest.

In some cases, the opportunity was about pursuing a topic that clearly sparked the interest of the learner(s). When looking through some web-sites, one learner was interested in the content of one particular topic and asked his teacher if he could spend more time reading it. However, the teacher responded by saying, “Yeah, or we could do it next week.” It was not clear if this was a diversionary answer or a genuine response (the session was drawing to a close, but did last another eight minutes after this request).

In other cases, the teaching moment related to opportunities to teach to specific literacy skills. Typically, these events involved some form of miscue (such as mis-reading a word or not being able to pronounce a word at all), where the teacher closed down this teaching opportunity by simply supplying the correct word. In other cases, the content of what was being discussed lent itself to further exploration and consolidation or correction of literacy skills. For example, in one class there was a series of questions asked about the lengths of various objects such as bridges and buildings, but the teacher did not explore or expand these dimensions in any way beyond the specific answers given by the students.

3.5.4 Fluency

Overall, we saw very few instances of teachers providing sustained activities aimed at increasing learners’ fluency.[29] However, we did see some examples of fluency in relation to numeracy where teachers gave additional opportunities for learners to practise newly-acquired skills beyond an initial level.

T: Well I’m happy with that, I think you need a bit of consolidating now, you understand now.
L: Yeah, it’s just getting familiar with it now eh?
T: That’s right, yeah.

One 1:1 student for example was being taught how to read a 24 hour clock. Initially he struggled with the exercises involving this skill, but agreed to take some additional exercises home to for further practice. Later in the session, he signalled his unease with not having mastered the skill by interjecting (in the middle of a discussion about grammar) “I’ll kill that clock thing tonight.” The teacher took this as a prompt to return to the clock with further exercises until it was clear that he now understood how to do it. The teacher said that these additional examples would help “just to make sure that you’ve got it.” The learner obviously enjoyed this prolonged practice because of the satisfaction of being able to do it successfully.

[29] The literature review (Benseman et al., 2005, p. 61) showed that achieving greater fluency (usually in relation to reading) is an important component of effective teaching, although often under-utilised by teachers.

3.5.5 Teaching of reading

There were wide variations in how much explicit teaching of reading we saw, but there were certainly wide variations across the sessions. These variations ranged from full-on, 1:1 teaching sessions where the full 60 or 90 minutes was packed with a series of skill-teaching episodes and exercises for the learner to practise new skills; through group sessions where there was occasional, direct teaching of reading skills (some of these were integrated programmes where the prime focus was on subject content); to several sessions where there was no direct teaching of reading in any shape or form.

The teaching of reading generally took a number of forms in both 1:1 and groups:

- reading aloud of a text, with the teacher responding to miscues in various ways (see following section)
- silent reading of a text, followed by teacher questions (usually in relation to comprehension)
- teacher reading aloud while learners follow the text individually, followed by teacher asking comprehension questions
- explicit teaching of a skill, followed by a series of written exercises
- independent reading of material over a period, followed by answering of written questions and discussion of the answers as a group.

There were considerable variations among the teachers in terms of the degree of teacher reactions to learners and interventions in each of these approaches. Some teachers managed the teaching process proactively (inserting questions, micro-teaching of points arising). Reviewing the spelling of 'reptile' in a spelling test led one teacher/learner pair on to an extensive discussion of homonyms of the 'ile' sound – aisle, isle and I'll – the latter then leading on to another discussion about the use of apostrophes when shortening words as in I'm, I'll and I've.

Other teachers intervened noticeably less often. We observed one teacher for example who, in 167 minutes of teaching (involving the teaching of some technical content) did not undertake any explicit activities relating to reading skills. About half of this duration involved a participant classified as a 'high literacy needs' learner, where the only recognition of this need was to be taught 1:1 and at a slower pace than his counterparts in the other session. Teaching reading in this case consisted of the learner endeavouring to read a workbook aloud, with the teacher providing affirmation and corrections where necessary, but no explicit teaching in response to the learner's performance.

Below is a reasonably typical account of how one teacher explained the range of teaching activities involving reading in their programme.

> We sometimes do get people to read aloud around things and it's just a matter of sounding the phonic sounds. We try to encourage everyone to have a book. We regularly visit the library or encourage people to develop library skills and we list what they can get there. Every day, we have two newspapers, sometimes if there's an article, a real interest, good article we might do a group reading of that where people will just read a part of it loud in the group and those who don't want to, don't have to. Just, some people feel totally daunted, and they probably have difficulty reading, just reading quietly on their own, but we do have people who struggle with reading as well. No one here at the moment, that can't read.

> [Talking about a learner with particular difficulties] [Name] sits down with her sometimes and gets her to read things and that would be the way we do it, to get down alongside someone, sit down and find a piece of reading they're gonna not struggle with too much and just work through it, work through the sound and the strategies, recognising different words.

We classified each of the 25 reading episodes in the sessions we observed according to five components of reading to give a broad indication of the areas that teachers were covering in their teaching (Table 3 below). Some of the sessions covered only one reading component, while other sessions covered several, but never more than three components.

Table 3 - Generic reading components covered in teaching episodes (n=25)

Alphabetics	3
Vocabulary	9
Fluency	3
Comprehension	8
Grammar/language form	2

Next is a list of the various techniques we observed tutors using to specifically teach reading. We were interested in the numbers and types of teaching techniques that teachers used, rather than their overall frequency in the teaching sessions, so the maximum number is therefore 15.

Table 4 - Teaching of reading techniques used (n=15 teachers)

Reading aloud	7
Clarifying meaning of text	6
Word analysis	5
Querying meaning of words	5
Recall/review	4
Skimming	3
Using context for meaning	3
Silent reading	3
Summarising	2
Cloze procedure	2
Repeat reading	1

We observed several teachers who did not specifically teach any reading skills (or other literacy, numeracy and language components such as numeracy or writing) in the course of our observations. In these sessions, the learners would typically read aloud from a text source and when they made errors or faltered, the teacher simply supplied the correct word or omission. They did not use any of these errors or omissions as prompts for teaching (a specific form of seizing the 'teaching moment'); nor did we see them teaching literacy, numeracy and language skills in separate parts of the sessions. While some of their questions were centred on comprehension (especially the understanding of difficult vocabulary), most of the questions were related to the technical content of the texts (supplemented by explanations by the teachers), rather than the analysis or development of the literacy, numeracy and language skills involved.

Phonemic awareness

We did not observe many instances of teachers explicitly teaching skills to improve learners' phonemic awareness.[30] Of the 15 teachers, about a third appeared to incorporate phonemic elements into their teaching.

In most cases where learners made errors in their de-coding of words, the teachers simply supplied the correct word, which the learner usually repeated and continued on with the next piece of text.

L: histo, histo …
T: Historic, yeah.
L: Uum …
T: But the larger word is?
L: Historic?
T: Yes, historic hotel, great.

In contrast, the following example illustrates a teacher who taught not only the initial (or onset) phonemes, but also the subsequent parts of the word in order to decode it in its entirety.

L: …that was … ob, ob …
T: Oh yeah, that one. But just picking out part, you know, looking at the beginning, the middle and the end of the word …
L: obsince, is it?
T: Well, you've got the ob OK, and the s, now what about looking here …
L: s, e?
T: Yeah, I think you just about said it there. What about that part of the word?
L: scene …
T: Yeah a sc and a, yeah …
L: ob … scene
T: OK.
L: Obscene right.
T: Yeah.

This teacher focused on the final sounds of 'didn't' in the course of doing a spelling test.

T: Didn't, he didn't know how to do it, didn't.
L: Did. Did.
T: Good, that d, that's great. Did [long pause[he did know, that's good, now we want didn't, didn't. On the end here, just keep going, didn't.
L: n
T: [intonation – agrees] And one more letter, didn't, what can you hear at the end? You say it.
L: T [writes didn't]
T: That's right, didn't. Excellent.

[30] *Phonemic awareness* is the insight that spoken words are made up of a sequence of phonemes (the smallest units of sounds).

Another teacher used a cloze procedure to help her learner improve his skill in discriminating between phonemes. Reading a sentence aloud, the learner was required to identify which of three similar words (e.g. weight, weigh and weighed) was correct.

Probably the most intensive teaching of phonemic awareness occurred in several 1:1 sessions where the teachers were able to respond immediately to learner miscues and teach to the errors. These interchanges were very focussed on the learner's difficulties.

One programme was notable for its heavy emphasis on the teaching of phonics based on an American series of videos. The teacher had chosen this approach because of her reading of research about phonics and seeing it used successfully by another teacher. This teacher found that the videos were a particularly fitting means of teaching phonics.

> On the video she repeats, you know, so all the time, she's revising and repeating and adding it in a structured way, which is very hard to do. To design teaching, lessons to do it naturally, is extremely hard, and it does teach reading, people really improve their reading, but where it's not so good is that it's hard for people to come in at different points of it [once the series is started].

Responding to reading miscues

We have already discussed above the issue of how the teachers responded to general questions and the significance of 'teaching moments'. How miscues are dealt with in teaching reading is particularly important because the miscues not only signal the specific difficulties that learners are experiencing, but also provide the teacher with an opportunity to focus the teaching on that difficulty.

One teacher clearly indicated to her learner in advance that she would be available to help on any difficulties arising from his silent reading.

> T: Do you want help with that [name]? Or are you quite happy?
> L: Yeah.
> T: Do you want help?
> L: Yeah.
> T: Well just yell out when you do.

We did not see much evidence of teachers focusing their teaching on learners' specific difficulties. One exception to this was a teacher who, after a learner had read her spelling list aloud, said "OK, let's go through and have a look at your trouble spots." The pair then reviewed her errors, discussing why they had been made, ways of preventing them in the future (e.g. talking about the 'i' before 'e' rule) and practising with comparable words. Word families covered in this process were then recorded in the learner's notebook for future reference and review.

Below is an excerpt from the same session where the teacher infers an error in his spelling of 'fish'. It is also a good example of the teacher prompting through questions, forcing the learner to provide the solution.

T: Aha. Now just have a look at that word. Something in there does not belong there does it? You've got one letter in there that needs to be taken away.
L: i
T: What would that do to that word if we took away the i? We'd just be left with all of that wouldn't you, so it would be a funny looking word. Does that look a bit …?
L: [laughs[
T: Looks a bit funny doesn't it? Well we won't take away the i, what else might we take out?
L: c
T: What, what does that letter sound like?
L: sh
T: See, we want sh, not …
L: c
T: [intonation – agrees] Take it out. Now write the word again without that c in it and see if it looks better. Yes, yes. Alight. Now have a look.
L: Fish, yeah.

Comprehension

The little explicit teaching of comprehension[31] that we saw involved teachers using the understanding from the context to correct mis-pronounced words as in this example.

T: I'll read to you what you said, and you see if you can spot the error. 'Thomas is putting ice, jam and chopped nuts on the scroll buns'. What do you put on the scroll buns?
L: Nuts.
T: Yeah, nuts. And?
L: Jam.
T: And this? [pointing to word]
L: Ice.
T: Do you put ice on buns?
L: Icing [laughs].

Even where there was silent reading or reading aloud, there were very few instances of teachers asking questions involving broader interpretations of texts and their meanings.

Grammar and pronunciation rules

Three teachers introduced rules governing language and pronunciation that learners could apply to unknown words or text in the future. For example, one teacher explored a range of words with her student where the adding of an 'e' to a word changed the vowel sound ('sit' becomes 'site'):

[31] This statement appears to contradict the high incidence of comprehension episodes shown in Table 3; the comprehension episodes in this table include simple reading of texts, but did not necessarily include teacher questions or comprehension-related activities.

T: Well no, you haven't because we'll look at it again, so it's looking at your article where you were reading, if we look at a word like here [time], so if we just have Tim is Tim and put the 'e' on the here.
L: Time.
T: So you're gonna say the …
L: i
T: i sound, OK. So what I'll do now, is I've introduced you to that, when we're reading, we'll look at words, and I'll go, well what's you know and if you're not sure of something, I'll say, well, what's the 'e' going to do to that vowel and we'll talk about it as we go along because, so it's just introducing a little skill like that at a time.
L: Oh yeah, I like that.
T: It opens up new words for you. So, I mean another one you have [writes Sam]
L: same
T: the 'a' sound
L: That's how I got that, 'cause I went 'ame'. The 'ame' in same, yeah.

This teacher also discussed with her student what constituted a sentence and identified its components. Another teacher asked her student for examples of nouns, common nouns and proper nouns.

T: OK. Let's have a look at nouns, looking for nouns, what are nouns? What's a common noun? What do nouns do?
L: Name things?
T: OK, name things.
L: Hmm
T: Cool. Do you remember a common noun is?
L: It's something that's still …
T: A ball, anything, a ball, a car, a computer OK, do you remember what a proper noun is? Proper noun …
L: Capitals …?
T: And it's normally a place or a name of a person a place or a …? Can you give me a couple of examples?
L: Captain Cook I suppose, Australia, London …
T: Jesus Christ?
L: Yeah, well he's the main man!
T: Good, so proper nouns are particular persons, places can you remember that one?
L: Yeah.
T: OK, collective noun, do you remember that one?
L: A group of things.
T: A group of things. Right, give me a couple of examples?
L: Swarm of bees.
T: Good, swarm of bees, a …
L: Mongrel Mob eh, debt collectors - that's a gang of things eh, a gang of, I don't mean a gang …
T: A big group of people or things eh?
L: Yeah.
T: OK, so what about verbs
L: Good question, can't remember now (laughs)
T: Cause you do.
L: Yeah, now …
T: Of doing …
L: Of doing things …

T: Like what, give me an example ...
L: Like I went to the shop.
T: Great.

3.5.6 Numeracy

Of the five sessions we observed involving numeracy, four involved the teaching of number functions and three involved measurement. Specific numeracy teaching techniques are shown in the table below.

Table 5 - Numeracy teaching techniques (n=5)

Estimating	5
Calculating	5
Measuring	3
Worksheet	2
Using calculator	2
Interpreting data	1
Counting	1
Using basic facts	1

The teaching of numeracy that we observed was probably more structured and consistent overall than the teaching of other literacy, numeracy and language components. A typical teaching session would involve the teacher demonstrating and explaining a particular mathematical process - for example:

> T: OK, with a twenty four hour clock, the day starts after midnight, and the first hour reads at one o'clock when the time is past one o'clock that afternoon, so one o'clock then becomes thirteen hundred, OK, and is 'one hundred hours', in fact all the time, so two am is written as 0200, and said, 'O two hundred hours'. Ten o'clock am is written 1000 hours, four o'clock pm is 1600 and so on…

The teacher started with simple examples and then progressed to more difficult ones, all the time checking that the students understood her examples.

Learners would then typically be set some exercises based on the teaching demonstration. In one case, the teacher encouraged the learners to do the exercises independently and then to review and discuss their answers in small groups or pairs; this group then marked their work with the teacher writing the learners' answers on the whiteboard and prompting debate when answers differed among the group members. In other sessions, the teacher would typically move around the learners while they were working on the exercises, commenting on their progress and working individually with those who were struggling.

In some cases, there was no group teaching at the beginning; these teachers would hand out worksheets and then work with learners individually. One teacher explained in her interview:

> The other thing we do have is worksheets - we didn't have time today - but I have some worksheets targeted for different people or we have a folder and they can just choose what they want from it. We try different

> ways of doing this and there's numeracy in there. So sometimes people will take the numeracy worksheets to work on, and sometimes if someone says that's what they want, I'll bring in a worksheet to target that particular aspect.

Teachers thought it important to make the examples as visual as possible, to use teaching aids (especially to help kinaesthetic learners), always relate examples to the 'real world' and consolidate skills through revision and practice (comparable to reading fluency).

Another distinctive feature of the numeracy teaching was how the teachers frequently focused their teaching on the specific errors being made by the learners. When they made mistakes, the teacher would analyse the cause of the error (such as not maintaining clear columns in long multiplication) and then teach specifically to this error. We saw very little teaching focused in a comparable way with other literacy, numeracy and language areas such as reading and writing.

3.5.7 Spelling

Only five of the teachers observed were doing some teaching of spelling; in most cases it occurred incidentally as part of reading, writing or even maths sessions. The teaching methods used are summarised in the table below.

Table 6 - Teaching of spelling techniques (n=5)

Syllabification	4
Recognising patterns	3
Sounding out	2
Constructing word families	2
The use of dictionaries	1
Word-games	1

Typically, a learner would ask "How do you spell [place name]?" The teacher would spell it out, and might supplement this by explaining how it is pronounced.

> T: Palagi use their finger to …?
> L: To be, signal, use their finger to signal.
> T: Yeah, signal, that's a good word yeah, to signal, good. How do you spell signal?
> L: S, i, g …n, a … l?
> T: Yeah, that's it. So what are they signalling? So, the Palagi use fingers to signal you to ...?
> L: Come.

There were very few instances of the teacher making the learner produce the answer through phonemic prompts (such as identifying onset sounds in a word or identifying known words with similar sound components).

In several sessions, teachers ran specific activities aimed at building up spelling skills (including testing of word lists given the previous week and learnt by the student in his own time), but these activities also had broader benefits such as increasing vocabulary, sharpening listening skills useful for reading and even the physical

practice of writing. The lists of words in these spelling sessions were sometimes related to other work, but were usually words chosen by the teacher to match the learners' current spelling abilities. In two of the sessions, learners were encouraged to make use of dictionaries, but only after attempting the word independently first.

3.5.8 Writing

Six of the sessions observed involved some teaching of writing. The writing skills observed were proofing (3), planning writing (2), drafting, syntax and punctuation (all 1).

A number of the teachers commented that their learners' writing skills were noticeably lower than their other skills (including reading) and that they found it difficult to make an impact on this skill – "writing is actually, in some ways, the hardest or the slowest to see progress in." They also commented that they did not always find it easy to incorporate writing into their teaching sessions and it often tended to be missed out.

Several of the teachers commented that they consciously planned to include at least some writing in their sessions, even when the sessions were predominantly on another area such as numeracy.

> They do short stories from time to time and read out in front of the class. We will usually choose a topic and people will write something about it, we will say do 250 words on whatever the topic is and they read it out. They absolutely hate doing it, but I think it's good. I think it builds up their confidence over time and it also gets them into the habit. Quite often they have an idea in here and they are trying to get it down on paper and they miss out a lot.

One 1:1 teacher asked her learners at the conclusion of each session to write even a couple of sentences reflecting on what they had covered in that session and any insights they had gained from it. This writing was then read aloud as the first activity in the next session, to recap from the previous session, as a warm-up for the new session and as a means of identifying learning needs for subsequent sessions.

Even when rushing out for an appointment, one learner managed to write "I liked today's coures [sic]" and signed it. Another teacher ensured that her students did some free writing in their learning journals in each session.

A typical writing session in an integrated class (with two teachers, one of which was a literacy specialist), involved the literacy teacher running part of the session on how to write an e-mail. She first gave them a handout about e-mails, then explained reasons for having this session (the previous week's assessment showed that some had not written their e-mails correctly); the teacher then briefly talked them through the handout and then composed an example on the whiteboard, with the content and form generated as a result of the teacher's questioning the learners.

In another session on letter-writing, another teacher first brain-stormed types of letters on the whiteboard; picking out one type of letter. She then produced an example of one cut into its main components, which the learners (in pairs) were asked to assemble into its correct order. The session was then completed by the teacher composing a model letter on the whiteboard, based on learners' responses to her questions.

When writing was taught in 1:1 situations, the teacher was able to tailor the session much more to the needs of the individual learner. This teacher is talking about a session she has just run for an individual student with poor writing skills.

> T: She will write stuff and she'll write quite quickly and then won't be quite sure what it is that she's written. So she was going back over it and I was trying to help her to get some sense of what she wanted to say because she could've had quite a volume of writing, but it won't necessarily really come together for a reader or for her, either. So that's the approach. Our types of students, they're very, very different and it requires a very different approach for each person, but usually what I try to do is supply her with some words that she needs and sometimes if she hasn't already done the piece of writing I'll sit with her and kind of talk with her about what she wants to write about and actually help her to create a word bank.
>
> I: Is that what you were doing when I saw you writing?
>
> T: Yeah and so that's what I usually do in the first step. But she had actually already done the first step, so I was actually establishing a word bank for her so that, 'cause some people know enough about the word that they could go to a dictionary and find the word. Like the wee girl in the yellow, she was going to do that, because she's got that sort of skill, she can approach a dictionary and know enough about a word in there, but the other lass, needed to have them written down and once they're written down, she can read them, usually, or sound them out at least legibly and so a dictionary is not really an option, so, a word bank.

3.5.9 English for Speakers of Other Languages (ESOL)

We did not observe any classes solely concerned with the teaching of ESOL skills, although many of the classes and 1:1 teaching did involve learners whose first language was not English – in some classes these students were in the majority. In many cases, there did not appear to be significant differences between how these learners were taught and their non-ESOL counterparts.

In several of the classes, the ESOL students were seen as very capable readers and who mainly needed practice in their speaking skills.

> T: They are all very good readers. They're working on correspondence English programmes, which do involve reading with a tape. Play it in their ear and they read it, as they're hearing it. Yes, the [nationality] students' programme is from correspondence, so they do a lot of reading of the newspaper. And then our strategy with them, is to work with them, discussing the article and try and get obviously the comprehension and also the discussion, the conversation that can be hard sometimes 'cause they just sort of want to work from their books and so it can be really difficult.

One interaction between a 1:1 teacher and her student illustrates the implications of teaching ESOL learners to read English. In this interchange, the teacher is endeavouring to build up word families, but the student's limited English vocabulary restricts the usefulness of the exercise.

T: Can you think of any other words that rhyme with fast, past and last? What does a boat have?
L: Haste?
T: What's this thing here? [drawing a boat]
L: Boat
T: A boat has a ...? Have you heard of the word mast?
L: Mast.
T: The mast on a boat.
L: Mast.
T: Mast. That holds the sail up. Right, there's your sail, that's the mast, mast.
L: Fast, past.
T: l …
L: Last.
T: m …
L: Mast.
T: Very good. When, when one of your children breaks their arm, they have to go to hospital, what do they put on the arm, it's called a plaster c, c …
L: Booster, gast?
T: It's this [writing the word], c, cast.
L: Gast.
T: It's called a plaster cast, to keep the bones together.

There were certainly numerous references to cultural differences in many of the sessions. One teacher for example made conscious efforts to learn and incorporate vocabulary from the learners' first languages – as reflected in stickies with words written on them posted around the teaching room and in this interchange:

T: Yeah I know, it's getting harder for you. You say that very confident, too hard, you can go, 'o ya way', 'o ya way' - is that how you say it?
L: Yeah, 'o ya way'.
T: 'O ya way,' too hard.
L: Too hard.
T: That's why I say to [name], 'oh ya way.' So hard.
L: So hard.
T: Yeah.

3.5.10 Oracy

We observed six sessions that involved explicit teaching of oracy skills (predominantly about speaking, but three also involved listening exercises). Like writing and spelling, teachers tended to intersperse the teaching of oracy throughout their other teaching, but they still saw it was an important part of literacy, numeracy and language teaching, especially in relation to improving learners' self-confidence. This teacher said that she found role-plays particularly useful for developing learners' speaking skills.

T: It is also something that reinforces confidence for the ones who like doing this, but at the same time it involves talking, it involves looking at other people's things and actually conversing, which is probably one of the biggest areas of youth - actual conversation,

communication for a purpose, which I think is an area which is really lacking. There is a lot of conversation, but little comes out of it. Even a certain amount of lack of confidence in knowing who to ask how to ask for certain things, learning to ask for things like, to make appointments, to ask for information about 'how do I get my IRD number', 'what information do I have to have' and 'what information do I have to give'?

I: So you'll role-play those things?

T: Yeah and a some of them actually do it themselves and yeah, some very scared individuals – 'what's the person at the other end of the phone going to say?', and just the steps the strategies for doing this - using the phone, using the phone to government departments or businesses is a real barrier. Just chatting away is fine, but to actually use it to find bus times, information about other courses …

I: So do you take those opportunities as they arise or do you say today we are going to…?

T: Yeah, usually as they arise because they're often things which are immediate, they need to be done, it isn't, 'yes we will talk about that later'.

However we also observed several sessions where oral skills were being taught explicitly. For example, one teacher explored oral delivery techniques (Unit Standard 8828) as part of a bridging education course. The students brain-stormed the range of techniques available and ways to make their delivery more important. This was done in pairs and small groups, and they recorded their ideas on a work-sheet, and then reported back to the whole group. This teacher constantly sought to open up discussion about speaking techniques by asking open-ended and clarifying questions.

4 Summary and Discussion

This final section of the report provides a discussion of the study's major findings and relates them where possible to the related research literature (Benseman et al., 2005).

4.1 Teacher status and backgrounds

The 15 teachers we observed in this study probably represent a reasonable cross-section of those currently teaching literacy, numeracy and language in New Zealand, both in terms of their characteristics and the contexts in which they teach. They are predominantly female, Pakeha and over 40 years of age. This type of socio-demographic profile is also consistent with the broader adult education sector, where people typically come in through the 'back door' after working first in other vocational areas. With the exception of those teachers working in tertiary institutions, many have minimal job security, operating on short-term contracts or on a casual basis, paid by the hour provided learners turn up. Similar to Smith and Hofer's (2003) study in the US, the lack of a distinct career structure and poor employment security means that literacy, numeracy and language teaching is predominantly marginal in character, sustained in large part by teachers' commitment to their learners and philosophical ideals. The average of only 2.25 years literacy, numeracy and language experience of the teachers in this study is indicative of the turnover of staff in the sector.

All but one of the participating teachers in this study had some form of tertiary qualification. However, few of these qualifications were related specifically to LNL, or adult education generally. Apart from the four who had done the Literacy Aotearoa literacy training,[32] three had ESOL qualifications and one other was currently completing an adult literacy certificate. As a point of comparison, a much higher proportion of the Australian counterparts in McGuirk's (2001) study had specialist qualifications (a pre-condition for receiving funding). Most of the teachers in this study had undertaken some form of professional development over the past year, but again there was considerable variation in the amount done, with those in tertiary institutions or literacy, numeracy and language agencies able to do the most.

There is considerable variation in the number of hours the teachers teach per week, ranging from 7-35 hours per week. About half of the group teach in excess of 20 hours per week. There is also variation in the amount of time that they spend in preparation for teaching. Most spend about five hours per week, with four spending in excess of ten hours. Most did preparation in excess of what they were paid for, and did not have explicit agreements as to the amount of time for preparation.

Three of the participating teachers taught as part of a dual teaching approach. One of these situations was notable for the way that the literacy, numeracy and language specialist taught alongside a vocational teacher. In addition to direct teaching of literacy skills, this teacher also ensured that literacy, numeracy and language issues were identified and then minimised or resolved, thus ensuring effective delivery of the vocational content. In this way, the LNL teacher effectively operated as an advocate-

[32] Of approximately 100 hours duration.

cum-interpreter for the students in relation to their literacy, numeracy and language difficulties.

While having open entry/exit of learners is seen as a challenge to these teachers, most see it as part and parcel of their sector. 'No-shows' were perceived as a greater challenge because of the loss of learning momentum that results, necessitating recapping and consolidation and the risk of learners feeling that they are not making progress, leading to early withdrawal.

The picture that emerges from the brief portrait of literacy, numeracy and language teachers in this study does not readily match what our literature review indicated as ideal for effective practice, which was that teachers who are well trained in LNL-related processes are central to enhancing literacy gains. Full-time teachers with ready access to PD are the most likely to be effective and they need adequate planning time. Probably only a minority of the teachers in this study could substantially meet these criteria.

4.2 Physical environment and teaching resources

LNL's marginal status is also reflected in the poor quality physical environments in which the teaching often takes place and the paucity of resources available to the teachers. Nonetheless, the teachers in this study had endeavoured to make their teaching spaces welcoming and comfortable for their learners. There is often a strong determination by the teachers to make their teaching spaces and the way they run their programmes demonstrably different from schools, which has a negative association for many literacy, numeracy and language learners that these teachers feel they are constantly trying to overcome in their work.[33]

Literacy, numeracy and language teaching is dominated by the use of whiteboards and their smaller equivalents, the note-sheet or butcher's paper. While we saw virtually no use of published literacy, numeracy and language textbooks, there was widespread use of worksheets, some of which were commercially produced (especially in relation to unit standards), but most were compiled by the teachers. The worksheets were used for a variety of purposes, but predominantly for consolidation or practice of skills taught. Learners independently working on worksheets enabled the teachers to work individually with students – effectively offering 1:1 tuition within group settings. Indeed, some classroom settings operated as a series of 1:1 teaching episodes, rather than a conventional classroom. While most of the teachers (especially the less experienced ones) clearly valued their worksheets, a few were critical of their use, saying that they did not necessarily fit the specific learning needs of students and could not be readily tailored to individual interests.

While we observed only three of the 15 teachers actually using computers in their teaching, all but one reported that they were able to access them and used them to some degree in their teaching. We did not see any CAI software of the type reported in our literature review (Benseman et al., 2005, Section 3.3.3) in use. Most of the software in use or available to the teachers was of commonly-used commercial origins; the computers were therefore mainly used for teaching word-processing type skills and carrying out independent research projects. Their use enabled the teachers

[33] This criticism of schools is a consistent theme in LNL research (Benseman & Tobias, 2003). It is important to note that 'school' often refers to experiences of 10-50 years ago, which may differ from current school practices.

to move around individual learners, effectively 'plate-spinning' as they provided 1:1 teaching while other students worked on their projects.

There was variable access to the Internet, although most of those without access said they expected to improve this situation in the foreseeable future.

4.3 Generic teaching skills

There are generic components of teaching that are fundamental to achieving LNL outcomes, as indicated in the Adult Learning Inspectorate (2003) report from Britain. We therefore gave due consideration to these components in our observations, although none of the three observation studies reviewed in the beginning of this report appear to have done so.

Irrespective of the physical environments, all of the teachers we observed appeared to have created positive, inclusive learning environments for their learners, which was reflected in learners' body language and interactions with the teachers. Most of the teachers stressed the importance of the affective domain for many of their students, given their low self-confidence. They see that helping address personal issues and crises is an essential pre-requisite (or at least a co-requisite) to being able to address their cognitive development.[34]

While this study has focused primarily on literacy, numeracy and language teachers, it is important to make a brief comment about the learners they work with. Educationally, students with literacy, numeracy and language needs are a very challenging group to teach. While not all literacy, numeracy and language learners lack self-confidence or skills across the board, many do, and most lack self-efficacy,[35] at least initially. Most have experienced only sporadic success as learners previously, despite being part of the schooling system for at least a decade. Even when highly motivated, they still require skilled tuition to make any impact, especially given the limited time they are able to attend in many cases.

Most of these aspects of the learning environment closely match the findings of the literature review. Close, supportive relationships with learners within a positive learning environment (a learning community) are closely linked to positive LNL gains.

Generic teaching skills (i.e. not specific to literacy, numeracy and language) are an important and prominent part of what goes on in LNL classrooms. Probably the most important generic teaching skill we observed was questioning. Questions, whether teacher → learner, learner → teacher or learner ↔ learner, are used for range of purposes and are probably the most fundamental teaching tool that tutors use. While we did not record every detail about questioning in our observations, we are still able to make some general comments about the nature of the questions we heard.

- the questions were asked predominantly by teachers, with only a couple of situations of learners asking reasonable numbers of questions; we saw virtually no learner ↔ learner questioning

[34] This is not to imply that LNL learners have constant crises in their lives; however even occasional ones for a single learner can still have implications for the whole group.

[35] Self-efficacy is a belief in one's ability to carry out the actions necessary to manage particular situations. It is more specific to learning than either self-confidence or self-esteem. For further information see http://www.emory.edu/EDUCATION/mfp/efficacy.html

- Secondly, the questions posed were predominantly closed (as opposed to open), where there was an expectation that learners would supply a single, correct answer.
- Thirdly, few questions required higher level thinking; most only required recall or description.
- Fourthly, it was noticeable that few of the teachers left much time between posing the question and subsequent responses. This lack of 'gap' (when a correct answer was not provided immediately) meant that learners appeared to be under little pressure to respond (even by asking their own questions in response), before the teacher 'rescued' them by either asking an easier question or, more likely, by simply supplying the correct answer themselves.
- Fifthly, there were few instances of teachers responding to incorrect or incomplete answers by asking clarifying or scaffolding-type questions that would enable the learners to eventually answer the original question.

One probable consequence of the types of questions being asked was that we saw very little sustained discussion or debate among teachers and learners. Allied to this was that teachers asked very few questions seeking learners' opinions or values. These findings are consistent with the two American studies reviewed earlier in this report (Beder, 2001; Scogins & Knell, 2001).

Another area of interest in all forms of education is the patterns of participation among learners and also between the teacher and learners. While most of the teachers endeavoured to ensure reasonably equitable participation of all the learners in group situations, some did not. We observed some teaching in classes where a small number of students dominated the responses to teachers' questions and the teachers appeared unaware of this imbalance or did not attempt to ensure that quiet students were given (prompted) opportunities to respond. While silence does not automatically mean that learning is not taking place, their non-responses and body language probably indicated that in most cases these learners were minimally engaged.

In the case of seven of the teachers (five 1:1 and two in classes) where we were able to record and transcribe most of their teaching, we found that teachers accounted for approximately 50% of the interactions, and in some cases, up to two-thirds. Of the learner contributions in these sessions, up to a third were single word responses.

We saw three different forms of teaching metacognitive skills, or learning to learn:

- the first involved providing a resource book on learning skills and resource material
- the second involved teachers helping their learners overcome physical impediments to their learning (sight and hearing)
- the third was the more conventional form of teaching students to reflect on their learning processes and outcomes.

Research literature related to generic teaching elements was not part of our literature review and were not discussed specifically in the observational studies reviewed.

4.4 Forms and types of provision

4.4.1 Duration and intensity of provision and tuition

Three key questions to ask in relation to literacy, numeracy and language provision are, how much tuition do literacy, numeracy and language learners access (programme duration), how is the tuition made available (programme intensity) and how intensive is it (teaching intensity)? While the literature review showed that programme duration of at least 100 hours is needed for literacy gains, this study also probably points to programme intensity and the intensity of teaching as important co-requisites. Therefore simply ensuring long programme duration (which might include considerable no-shows or even partial withdrawal for periods of time) is probably not a sufficient condition for ensuring learning gain. In all probability, high teaching intensity, with accompanying programme intensity and duration is the ideal, but rarely achievable because of how LNL resources are allocated and the difficulties for many adult students to be available in this way.

We saw considerable variations in terms of duration and intensity among the 15 teachers in this study. Some of these variations occurred because of the different skill levels of the teachers – for example, some group teachers managed to achieve considerable teaching intensity through their teaching skills and other strategies (such as dual teaching and use of videos), while others' teaching of literacy, numeracy and language was considerably less intense. Similarly, while some tutors teaching 1:1 probably offered intensive 1:1 teaching, others working in this format did not. In other words, these three dimensions of programme delivery varied not only from teacher to teacher, but also because of the programme formats (see following section) and the way the programmes were funded (programmes for the unemployed tended to be funded for longer duration).

4.4.2 Authenticity of curricula

Both the literacy, numeracy and language research literature and the professional adult learning literature (Purcell-Gates et al., 2002) point to the value of linking curricula to learners' interests and life events as adults. This study has shown that making curricula authentic can probably be done in a number of ways.

While we did not find any evidence of content taken from schooling contexts, we did see a limited interpretation of using authentic curricula. In most cases, this meant that the teachers interpreted the learners' interests 'on their behalf' – typically, they chose content that they thought was adult-appropriate and of topical interest. The other interpretation of authentic curricula was the contextualisation of material (e.g. in workplace sessions).

However, there were very few occasions where it was clear that the learners directly determined the content of the teaching material, especially arising spontaneously in the course of a teaching session. Indeed, on the few occasions where learners spontaneously suggested examples or incidents from their experience, these were largely seen as a diversion from the (teacher-directed) course content.

It is not clear as to the implications of these different interpretations of authentic curricula; in particular, there is potential to explore the differences between content that is totally learner-generated (in the sense that Malcolm Knowles (1984) intended in his concept of *andragogy*) in comparison with content that is relevant, current and adult-appropriate, but chosen by the teacher. Linked to this question is the degree of

flexibility that particular teaching contexts have to pursue a more learner-directed type of programme.

4.4.3 Integrated LNL provision

About half of the sessions we observed were ones where the literacy, numeracy and language teaching was integrated into the teaching of a subject area. Integrated, or embedded, literacy, numeracy and language provision has become a significant form of literacy, numeracy and language provision funded by the TEC over recent years. This study and our concurrent project that sought to map how much literacy, numeracy and language provision is offered in New Zealand (Sutton et al., 2005) have highlighted the difficulties (albeit in different ways) of determining just how much literacy, numeracy and language teaching actually occurs in integrated programmes. In the present study, we observed some integrated programmes where there was little or no explicit teaching of literacy, numeracy and language skills, either as stand-alone teaching or in response to clear demonstrations of learner difficulties in this regard. The only LNL-related response in some cases was for the teacher to work with high-need learners on a 1:1 basis (at a slower pace than usual) and ensure that reading content was simplified.

There were other instances where teaching of literacy, numeracy and language skills appeared to be a more prominent part of the teaching process, with deliberate literacy, numeracy and language teaching episodes interspersed or integrated with teaching of the main content. The methodology for our present study may not have done integrated provision justice – a longer period of observation and a specific focus on this form of provision may be needed to understand it more fully, but it certainly warrants further investigation because of its prominence and apparent mixed interpretations of what it means for teachers.

4.4.4 1:1 versus group tuition

Probably one of the major variations in literacy, numeracy and language provision is teaching on a 1:1 basis versus small groups or classes. Our literature review did not discover any research on their relative effectiveness and this study does not really provide any definitive observations on their relative merits. 1:1 teaching is expensive in terms of resources or volunteer time, but can provide intensive teaching focused on individual learning needs, although the format per se is no guarantee that this will always happen. Teaching groups of learners on the other hand is less expensive in terms of resources (probably very few groups are taught by volunteers), but means less time focused on individual learners and a constant danger that teaching is aimed predominantly at the greatest number of learners, thereby not catering for those outside the ‘middle ground’. Teachers could be seen to be effectively trying to combine the best qualities of both formats by moving from learner to learner on a 1:1 basis within groups.

The other dimension that needs to be kept in mind in relation to these different formats is that most 1:1 learners usually receive a limited programme intensity (typically one or two hours per week), while most learners in small groups or classes receive greater programme intensity (up to 30 hours per week), although many of them are in integrated programmes where there is probably less LNL instruction intensity.

What was clear from our observations was that for tutors to be able to meet the diverse needs of learners, LNL specific content skills and knowledge are needed together with both 1:1 and group teaching skills.

4.5 The teaching of LNL skills

One of the most significant and consistent findings from all three overseas observation studies reviewed earlier (Beder & Medina, 2001; Besser et al., 2004; Scogins & Knell, 2001) was that there was not a high incidence of literacy, numeracy and language skill teaching occurring in the classrooms; furthermore, the literature review (Benseman et al., 2005) confirmed the importance of these 'deliberate acts of teaching' in achieving literacy, numeracy and language outcomes. In general terms, this study also confirms this finding. Teaching in LNL classrooms does not necessarily equate with a high rate of explicitly teaching LNL skills.

All of the teachers in the study utilised some form of initial assessment,[36] but the methods they used varied considerably. In some cases, a colleague in the organisation carried out the initial assessments, but some of the teachers did not use these assessments, preferring to do their own. These assessments included background information about the learners, their motivations and goals and estimations of skill levels across literacy, numeracy and language areas. Few mentioned assessment tools that were diagnostic in their analysis. Individual Learning Plans (ILPs) are used by most of the teachers, albeit in different ways. Some appeared to be largely an administrative requirement, while others were updated regularly and used as the basis for detailed planning of sessions and used collaboratively with the learners.

4.5.1 Reading

The low incidence of deliberate acts of teaching was especially true of the teaching of reading skills. While we observed some sessions where there were sustained, deliberate acts of teaching reading skills, there were also a comparable number where there were very few, or even none. In the latter, there were neither stand-alone teaching sessions nor spontaneous teaching arising out of miscues. Probably the most frequent response we saw in relation to miscues was for the teacher to simply supply the correct word and encourage the learner to move on to the next piece of text. Many of these occurrences had a sense of the teacher wanting to 'rescue' the learner by quickly supplying the missing or mistaken word and thereby avoiding a sense of embarrassment or failure for the learner.

The 15 teachers did not use a very wide range of teaching strategies for teaching reading in the sessions that we observed. In the follow-up interviews, few identified strategies in addition to what we had observed. The predominant strategy was probably that of learners reading a piece of text (either silently or aloud) and the teacher asking questions about the content (usually about vocabulary rather than broader comprehension) or supplying additional information about the subject content. We observed about a third of the teachers teaching alphabetics and only a couple of these teachers did extended teaching of these skills. While there was quite a lot of vocabulary building in the sessions observed, we did not see much explicit teaching for comprehension or fluency. ESOL learners were largely taught the same way as other students in the study.

[36] More detailed information about LNL teachers' assessment tools and procedures will become available with the completion of a NZCER survey of this area early in 2005.

4.5.2 Numeracy

We saw more deliberate teaching of skills than any of the other literacy, numeracy and language skills. It is difficult to ascertain whether this is due to the nature of numeracy teaching or the skills of the teachers in these sessions. The numeracy teaching was also distinctive for the way that teachers clearly taught to diagnosed needs, first identifying causes of errors and then teaching strategies or routines to remedy these errors. The numeracy tasks were also noticeably graded in terms of ascending difficulty, with each task either consolidating current skills or moving on to the next grade of difficulty.

4.5.3 Spelling

Most of the episodes involving spelling were incidental to other teaching such as learners requesting the correct spelling of a word. In almost all of these episodes the teacher simply spelt the word and did not construct any deliberate teaching around the request. Several of the teachers gave their students spelling lists to learn each week, which were then tested during the teaching session. One of these teachers was notable in how she responded to the student's difficulties throughout the testing with phonemic analysis and exercises in order to extend his skills not only for spelling, but also reading.

4.5.4 Writing

A number of the teachers in this study commented that they found it difficult to make progress with learners' writing skills and that their writing skills are often noticeably worse than their other literacy, numeracy and language skills. We observed six sessions involving the teaching of writing. Although several of these sessions were predominantly about writing, the others were where the teachers interspersed the writing with other areas such as reading or even numeracy. Several of the teachers commented that while they believed that writing was particularly important and endeavoured to include at least some writing in each session, it still often ended up being left out in preference to other areas. These concerns mirror similar ones expressed by tutors in the studies reviewed in our wider literature review.

4.5.5 ESOL

We did not observe any ESOL lessons per se for this study, but many of the learners in our study were ESOL learners and in a few classes, these learners were in the majority. In several classes the ESOL students were clearly much more accomplished in their English reading skills than their non-ESOL fellow-students and their greatest need was for oral English. The teachers were certainly aware of the ESOL students in their classes, but in most cases there appeared to be little difference in the teaching strategies they used for these students vs. other English-speaking students. The most obvious differences were more careful enunciation of words and discussion of vocabulary.

4.5.6 Oracy

Speaking and listening skills is the least documented area of LNL. Some teachers however said that they believed it was an important set of skills, especially in building up learners' general self-confidence and social skills. Like spelling and writing, oracy was often interspersed with the teaching of other skills, but there were also several

sessions that concentrated solely on it. These both involved teaching students to speak in public.

5 Concluding comments

Finally, we would like to make some closing comments on what we see as the most important themes to emerge from this study.

Firstly, literacy, numeracy and language is a challenging field in which to work. Conditions and support services are rarely optimal and in addition, literacy, numeracy and language learners are educationally some of the most challenging people to teach. Our observations and the feedback from the teachers underlined the extent of the social and educational issues that many of these learners have.

Secondly, we were constantly reminded of the teachers' commitment, empathy and support for their learners. What keeps these people involved in this sector is their strong belief in the value of what literacy, numeracy and language programmes offer and the intrinsic interest of what they do in their jobs. For some of these teachers, the sense of commitment means that they regularly go 'beyond the call of duty' in order to help their students.

Thirdly, LNL is a truly diverse sector. Although we deliberately chose 15 teachers in a range of contexts, we were still aware of diversity across a number of dimensions:

- teachers, including their employment conditions, experience, types of qualifications and skill levels
- contexts, including workplaces, community organisations, tertiary institutions, marae, schools and private companies
- programme formats, including 1:1, small groups and classes, short vs. long duration, full- vs. part-time attendance
- learners, including motivational levels, availability and skill levels.

Fourthly, generic teaching and classroom management skills play a significant role in literacy, numeracy and language teaching. Our study has shown not only the high incidence of these elements, but also their importance in the teaching process. In this regard, we identified the management of equitable participation in teaching activities, the balance between teacher and learner participation, balancing support and challenge, affirmation, metacognition skills, the gradation and sequencing of content and especially questioning all to be worthy of note.

Fifthly, we did not see as many deliberate acts of literacy, numeracy and language teaching, whether as stand-alone or in response to errors or omissions, that we had expected to see. This finding is entirely consistent with overseas observational studies.

Sixthly, the range of teaching methods, both generic and LNL-related, was not very extensive. The teachers appeared to rely heavily on a small number of methods and did not indicate awareness of many alternatives in their interviews.

Finally, integrated literacy, numeracy and language programmes are still very much an unknown factor in literacy, numeracy and language provision. Our study has shown that in some integrated programmes there is very little specific teaching of

literacy, numeracy and language skills, but others manage to intersperse literacy, numeracy and language teaching into the teaching of non-literacy, numeracy and language curricula. This finding may have been unduly influenced by the short duration of our observations, but certainly warrants further research investigation.

6 Recommendations

We believe that this study has pointed to a number of major research areas that warrant further investigation:

- An in-depth study of a representative sample of LNL teachers as to their backgrounds, teaching philosophies (and how they operationalise these), current practices and employment conditions, their professional sources and supports and the issues they face.

- An investigation of how teachers teach literacy, numeracy and language in integrated programmes, leading to a variety of models of good practice that take into account the diversity of programme forms.

- A longitudinal study of learners that tracks them through the whole teaching learning process from initial contact to leaving the programme (including observation of teaching sessions). This study would also show a greater depth of information about teachers' practices and provide more useful information on learner progression as well as other related issues such as 'no-shows' and withdrawals.

- An action research project that investigates effective strategies for challenging and changing teachers' behaviours.

- A project to ensure wide dissemination of this study's findings into both initial tutor training and professional development programmes.

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Appendix A - Observation categories coding sheet

Instructional strategies			Components	Skills	Learner Activity
Facilitative Processes F1Greeting F2 Karakia F3 Admin. F4 Overview of today F5 Revision of last session F6 Warm-up activity F7 Personal chat F8 Personal support F9 Planning of future work F10 End of session review F11 Feedback for teacher F12 Pastoral care F13 Goal setting F14 Monitoring **Questions** Recall Interpretive Open vs closed	**Teaching methods** T1 Pre-tchg & explaining task T2 Question & answering T3 Facilitating discussion T4 Writing on board T5 Roving T6 Checking & correcting work T7 Instructing (giving info & explaining) T8 Lecturing T9 Scribing (incl lang. exp) T10 Reading aloud, dictating T11 Modelling (incl. thinking aloud) T12 Demonstrating (physical) T13 Presenting simulation T14 Game, puzzle T15 Role play T16 Giving feedback, praise T17 Brainstorming T18 Mind-mapping	**Reading**	R1 Alphabetics R2 Vocabulary R3 Fluency R4 Comprehension R5 Grammar	R5 Phonemic awareness R6 Analysing, decoding words R7 Phonics R8 Predicting & previewing R9 Scanning & Skimming R10 Summarising R11 Simple recalling R12 Using context for meaning R13 Clarifying main ideas in text R14 Crit. thinking (evaluate, identify message, analyse)	R15 Discussion R16 Silent or independent reading R17 Reading aloud (incl. round robin) R18 Guided reading (pre tchg to sm grp + supported individual reading + discussion + review) R19 Repeat reading R20 Answering oral questions R21 Answering written questions R22 Cloze R23 Dictionary work R24 Worksheet
		Numeracy	**N1** Shape & space **N2** Measurement **N3** Number **N4** Handling data & info processing	**N5** Estimating **N6** Calculating **N7** Matching **N8** Assembling data **N9** Presenting data **N10** Interpreting data **N11** Counting **N12** Measuring	**N13** Worksheet **N14** Problem-solving **N15** Hands-on with measuring instr. **N16** Hands-on with calculator
		Writing	**W1** Mechanics **W2** Processes **W3** Conventions **W4** Contexts (appropriate features & forms)	**W5** Handwriting **W6** Word processing **W7** Planning **W8** Composing & Drafting **W9** Proofing & Editing **W10** Sentence construction **W11** Punctuation **W12** Grammar (tenses, parts of speech, prepositions etc) **W13** Genre writing	**W14** Handwriting/ processing practice **W15** Discussion **W16** Writing task **W17** Shared writing (whole group + tutor) **W18** Guided writing (T starts, Ls continue) **W19** Journal writing **W20** Note-taking **W21** Free writing **W22** Worksheet **W23** Copying **W24** Using dictionary
		Spelling	**S1** Alphabetics **S2**	**S3** Sounding out **S4** Syllabification **S5** Recognising patterns	**S6** Dictionary **S7** Look, Say, Cover, Write **S8** Word families **S9** Memorising sight words **S10** Word games **S11** Computer **S12** Testing
		Oracy	O1 Pronunciation O2 Comprehension O3 Speech making	O4 Listening O5 Speaking	O6 Discussion O7 Word families O8 Speeches O9 Listening exerc. O10 Debates O11 Interviews